The Outlook

MAY 31, 1922

THE GENOA CONFERENCE ENDS

EITHER *diplomacy is getting blunter* or the blunt things that diplomats used to say to one another in secret are now being sent over the wires or through the ether. At Genoa there have been some frank speeches. Perhaps one reason why some observers are despondent about conditions in Europe is that they interpret this frankness as a symptom of international explosiveness. Those same observers would possibly have been more despondent if they had known of the explosiveness that existed in other days when frankness was not so common. When a safety-valve goes off, it may sound terrifying, but it is not deplored by the man who knows something of steam pressure.

Among the frankest speeches at Genoa was one made the other day by M. Colrat, of the French delegation, in reply to the Bolshevist delegate Tchitcherin's objection to the absence of Russia from the committee which deals with labor problems. M. Colrat said: "We felt that the Russians came so rarely to the meetings that they were unqualified to share in the discussions. The head of the Russian delegation is little justified, considering the present economic conditions of his country, in giving lessons to other countries." That is a sensitive point, not merely for Russia, but for some of the other nations which have met at Genoa.

Equally frank and very much to the point was the homely and direct scolding Mr. Lloyd George gave Russia in his speech at the final plenary session. He was optimistic to the extent that he thought that "the mixing of nations at Genoa had brought the Russian problem from the stage of jungle prejudice swarming with wild suspicions, to the cold, calm, and expert examination with which it will be treated at The Hague." Extremely plain-spoken was Mr. Lloyd George's comment on the Russian attitude as to finance. He said:

> First, if a man sells goods to another he has a strong prejudice in favor of payment for them. Second, if he lends money he has a strong prejudice in favor of repayment. And, third, if he lends money and his debtor comes to him asking more the creditor will ask about the first loan, and if the debtor replies that it is against his principles to pay his debts he is sure to come against a prejudice deep rooted in the foundations of Western civilization.

The adjournment of the Conference on May 19 has caused some relief. The Conference during its sessions has perhaps revealed more clearly than ever before divergencies in policy between great nations. It has given the Russian Bolsheviki a new lease of life. It has occasioned in many minds new fears for the future. But it has at least not brought about new conflicts. Its chief fruit is a temporary agreement for non-aggression in Europe and the reports of its various commissions, which may provide facts on which future action can be taken.

TURKISH ATROCITIES

BRIEF Associated Press despatches from Paris and London state that the French Government has accepted the invitation of the British Government to join in an official investigation of the alleged Turkish atrocities upon the Armenians. It is also reported in the same despatches that the British Government has invited, or proposes to invite, other Allied Governments and the Government of the United States to join in the investigation. Whether the United States and other Allied Governments accept the invitation or not, the British Government will send a special commissioner to Asia Minor. Thus we are assured that the long agitation against Turkish atrocities in Asia Minor, which has been reported from time to time in The Outlook, has produced results. France and Great Britain have taken action and hope that the American Government will join in this action. Unimpeachable evidence has been published from time to time in the newspapers of Europe and America and has come to us in private letters that Turkish officials in the Near East have persisted in the treatment of subject peoples which has given Turkey an unsavory reputation in the civilized world for more than half a century. It is said in defense of Turkey that some of the most engaging gentlemen of modern times are found among the educated Turks. If this is so, such Turkish gentlemen and citizens should do everything they can to co-operate with an official investigation in order to remove the stigma from their national name. Whether it is possible for the Allied Governments or for the American Government to put a stop by force to atrocious government on the part of the Turks is another question. But, at all events, the civilized world is entitled to know the facts. The step which Great Britain has taken and in which France is going to co-operate is a testimony to the value of persistent protest on the part of private citizens against international wrong-doing.

THE COAL LABOR WAR

THERE are few, if any, signs of peace by negotiation in the dual coal war.

The anthracite miners and operators have bargained with one another through sub-committees, but seem to disagree as badly as ever. This branch of the industry has at least carried out the agreement to negotiate for renewal and possible revision of contracts. The anthracite situation just now is that the operators have offered and the workers have refused a plan of agreement. Briefly, the operators propose a reduction of contract rates of 18 per cent below the rates fixed by the Anthracite Coal Commission in 1920, with day rates of men, boys, and laborers in proportion. Their argument is that the 1920 rates gave the miners earnings in excess of the cost of living at that time, and the cost of living has now been reduced by over 24 per cent—in view of which the miners' request for an increase is, say the operators, absurd.

The proposal of the anthracite operators also includes a commission to meet on March 1 each year if a joint committee of mine workers and operators have not agreed in February on a wage rate for the year. This joint commission should determine the proper wage rate. This commission should consist of five men to be appointed by the Presiding Judge of the United States Circuit Court of Appeals from the Third Judicial Circuit. Its membership of five should consist of a mining engineer and geologist not connected with coal mining; an economist of established reputation; a judge of the United States Court for the Eastern District of Pennsylvania; a man representative of the labor movement in the anthracite field; and a man who has had to do with the mining and selling

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of anthracite. The commission should have to do with the wage-rate question only; other relations to be covered by a five years' contract.

The anthracite miners have refused this proposal, chiefly on the ground that they consider that it would deprive the unions of the power and right to bargain collectively or to strike for needed improvements. Precisely why it should do so does not appear clearly in such statements as we have seen.

In the bituminous field the most important development has been Secretary Hoover's urgent request to the operators to make profiteering and high prices for coal during the strike impossible. Secretary Hoover is reported to have told the operators that "the coal industry would either govern itself or the Government would govern it." He made it perfectly clear that he did not desire to see the Government interfering in private business, but that the public interest must be cared for.

The operators to whom Mr. Hoover spoke accepted in principle the idea that a voluntary and temporary agreement for a sort of clearing-house committee in each coal district should be adopted. Each of these committees would have the duty of seeing that coal is distributed fairly to the industries that need it and that prices should not be allowed to get out of control even if that result should require certain restraint on the fixing of prices. It is hoped that the plan will be accepted by the many hundreds of bituminous operators when it is placed before them.

REGULATING THE INVESTMENTS OF INSURANCE COMPANIES

THE housing situation of the great cities of the country, especially New York City, has led some undoubtedly well-meaning persons to say that the funds collected in trust by the great insurance companies should be used (if necessary under legislative compulsion) to build homes for the people. It is quite proper that the lawmaking power should carefully regulate the financial operations of insurance companies, savings banks, trust companies, and other similar institutions, for such institutions are trustees for the people, and they should be inspected and regulated by law like trustees under a will. They should be told and are told—at least insurance companies and savings banks are told—that they may invest the funds intrusted to their charge only in certain kinds of securities and financial operations. But this is as far as the legislature should go. If the legislature attempts to say to an insurance company or a savings bank, "You must put so much of your trust funds in this kind of a security and so much in that kind of a security," the legislature then supplants the trustees in these public institutions and becomes sole trustee itself. It is not the function of the legislature to determine the details of such investments. No legislature has the time or capacity for such work. Its function should be regulatory and investigatory simply. Under a mistaken agitation which has been carried on in New York City during the past several months, the New York Legislature has passed what on the face of it appears to be a permissive act but is really in its moral effect a mandatory act compelling one of the great insurance companies to put a very large sum of money into the building of houses and apartments. This particular law may not be bad in itself, but it opens the door to very pernicious legislation.

The insurance companies and savings banks have been very reluctant to protest because of the fear that such a protest would be regarded by the public, which is not always very careful in its inferences, as a protest against regulation. We are therefore very glad that the Insurance Commissioner of Massachusetts, a State official, introduced in a recent meeting of Insurance Commissioners of the United States a resolution, which was apparently passed with unanimity, condemning the tendency in "several States during the past year" which "have contemplated legislation whereby insurance companies or certain classes of insurance companies would be required to invest certain proportions of their assets in designated forms of investment or in securities and investments having their location or origin in such States." The general ground upon which Commissioner Hobbs's protest is based is as follows:

> Be it resolved that the convention record itself as of the opinion that the soundness and efficiency of insurance companies and the prompt payment of their obligations is of paramount importance to the community wherein they make insurance upon property and lives and that the legislatures of the several States should aim at maintaining that soundness and efficiency rather than seek to divert their funds to uses inconsistent therewith.

The function of a mutual insurance company is to receive the premiums of its policy-holders and so invest them that it not only can pay the face of the policy when due but can, in addition, pay a dividend upon the premiums themselves. The function of the savings bank is to receive the deposits of its clients and so invest them that they can be paid back when called for, with an appropriate dividend. To perform these functions requires the most careful, well-trained, and constant devotion to honest and efficient finance and industrial development. This kind of knowledge can be attained only by men who are in constant touch with the work; and a legislator cannot give this constant attention. He can only say to the trustees of insurance companies and savings banks: "You must be honest and open; your investments when inspected must prove to be sound; and you must not use the funds of your beneficiaries in speculative purposes; therefore, there are certain classes of investments to which we limit you, but within those classes you are to use your own best judgment as to the character, the amount, and the location of the investment."

ORGANIZED BUSINESS GOES TO SCHOOL

ORGANIZED business has become interested in everything that promotes the well-being of the community, for it now recognizes that it can prosper only as the community prospers. This is why Chambers of Commerce are becoming educational institutions serving for the exchange and promotion of ideas for the benefit of the community as a whole.

This trend was never better illustrated than at the tenth annual meeting of the Chamber of Commerce of the United States, held in Washington, May 15–18. From its platform thousands of business men hailing from every State in the Union listened to discussions of the vital questions of the times from the lips of such men as President Harding; Secretaries Hughes and Hoover; A. D. Lasker, of the Shipping Board; Dwight W. Morrow, of J. P. Morgan & Co.; Mr. Howard, the head of the Federation of Farm Bureaus; and many manufacturers, merchants, and labor leaders. While the main themes were foreign affairs and their relation to American business and an American merchant marine, many technical and civic questions relating to housing, manufacturing, merchandising, immigration, etc., were analyzed and discussed. All these problems were approached from the various points of view of representative bankers, merchants, manufacturers, farmers, and labor.

If one may judge the temper of American business thus represented by its leaders and expressed by their applause, it strongly approves of the views of President Harding and his advisers regarding the necessity of basing international action upon a code of practice which demands respect for obligations, contracts, and the inviolability of pri-

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YOU CANNOT MAKE GROSS SINS LOOK CLEAR

(Timon of Athens, Act III, Scene 5)

Ireland in the Columbus Dispatch

THERE IS A DIFFERENCE BETWEEN THE FRENCH AND ENGLISH VIEW-POINTS

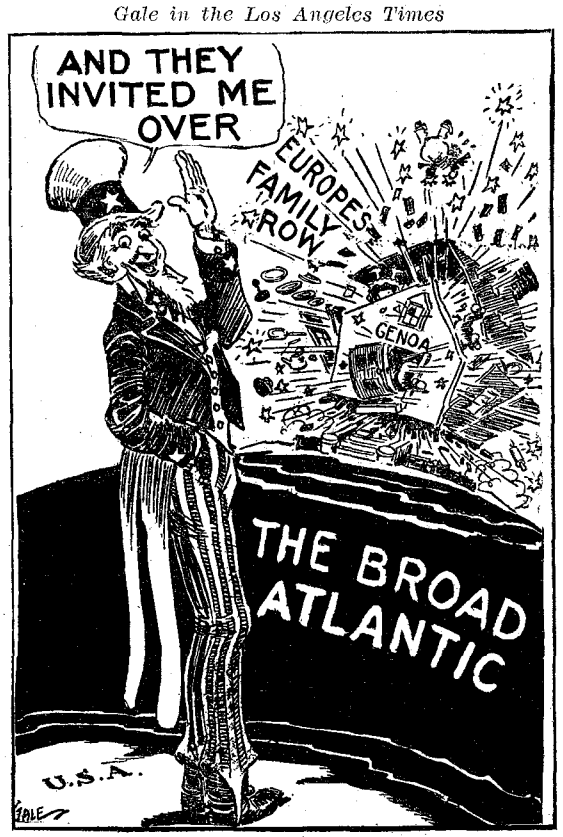
From Paul H. Ramsey, Columbus, Ohio

Darling in the Buffalo Evening News

MR. HUGHES DOESN'T BELIEVE MUCH IN FAITH WITHOUT WORKS

From Julius J. H. Hayn, Buffalo, N. Y.

Gale in the Los Angeles Times



A FINE PLACE NOT TO BE

From Lula D. Wadsworth, Maplewood, N. J.

Hunter in the Toronto Globe

QUITE UNABLE TO SEE IT

From Julius J. H. Hayn, Buffalo, N. Y.

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vate property rights. Both Secretary Hughes and Secretary Hoover emphasized this. President Harding, amid applause, urged the promotion of the exercise of conscience in business. This was amplified by Secretary Hughes, who pointed out that protection of American interests abroad "involved a certain measure of reciprocity" in the relations of the Department of State and business men. "This Government is not engaged in endeavoring to promote the opportunities of chicanery," he said. "Business interests in their dealings abroad are under a patriotic obligation to maintain the prestige of their country."

The delegates were keenly interested in the growth of the practical service which the Department of Commerce is rendering to American business. The Chamber went on record as advocating "an adequate privately owned and privately operated merchant marine under the American flag" receiving Government aid. It urged American representation on the Reparation Commission, and an International Court of Justice; the formulation of a plan for settling the claims of the United States and its citizens against the Governments of Germany, Austria, and Hungary and their nationals; that the basic railway law be continued; that the Army and Navy personnel remain adequate for National defense; and that passport requirements and other red tape in connection with international travel be abolished as soon as possible. In his address Secretary Hughes approved of reduction of passport restrictions and said that the present receipts of the Department of State, or Department for Peace, as he styled it, from viséing passports and other sources had made his Department a money-making institution, as receipts were more than a million in excess of expenses. He argued for a better-paid foreign service as one of the means of promoting business.

The meeting might be called a great business university.

THE SHOE MACHINERY CASE AND THE CODE OF INDUSTRY

Among the decisions of the United States Supreme Court that have determined fundamental principles of industrial practice and have built up a code of industrial rights is the recent decision in the case of the United Shoe Machinery Corporation. In particular, this decision makes more definite the bounds of what the law declares to be forbidden monopoly. It comes, therefore, in a direct line of succession to those decisions reaching backward into the distant past, by which the law both in this country and in England has undertaken to protect society against economic tyranny. Not all monopolies are illegal. Patent rights, for example, are virtually forms of monopoly which the law recognizes in order to encourage invention by assuring inventors undisturbed enjoyment of approximately just reward for their service. It is the adjustment between public rights and private rights that has created the problem in this case.

By virtue of its ownership of patents, the United Shoe Machinery Corporation, which the Supreme Court calls for brevity's sake the United Company, controls ninety-five per cent of the business of supplying shoe factories in the United States with the machinery for use. Instead of selling that machinery, the United Company has followed the practice of leasing it. It supplies machines of excellent quality; installs them; gives instructions to operators as to their use, and furnishes its machines to manufacturers with promptness, keeping them in repair, and, when necessary, replacing them. In leasing these machines the United Company has been in the habit of laying down conditions which the manufacturers are required to observe.

In a suit under the Sherman Anti-Trust Law the Government failed to secure the dissolution of the company or any injunction against the leases.

Later, however, a new law was placed upon the statute-books, known as the Clayton Act. This law forbids persons engaged in inter-State commerce to lease machinery, whether that machinery is patented or not, on the condition that the lessee shall not use or deal in the machinery or other commodities of a competitor of the lessor, where the effect of such leases would substantially lessen competition.

It is under the Clayton Act that the Supreme Court has now found these leases illegal. For example, one of these leases provides that the machinery shall not be used upon shoes upon which certain other machines of the company have not performed operations; and another clause provides that the lessee shall purchase supplies from the lessor. The effect of such leases makes it practically impossible for a factory to get necessary machines from the United Company if it uses machines of competing companies. The lower Court (the District Court of the United States for the Eastern District of Missouri) decided against the United Company, and enjoined the use of such clauses in these leases, and the United States Supreme Court has affirmed the decision of that district Court, and made these leases finally and irrevocably illegal.

PATENT RIGHTS, AND MONOPOLIES CONTRARY TO THE CONSTITUTION

The Supreme Court points out that the right secured by patentees does not give them the liberty to lease machines upon conditions prohibited by a valid law of the United States. It is true patentees have the right to restrain others from using their inventions, but do not have the liberty to impose conditions which are contrary to a Constitutional law.

It was argued by the United Company that Congress had not the Constitutional power to put this limitation upon the use of these patents because by doing so it would take away from the patentees without due process of law rights which they had. The Court answered, however, that from early decisions the patent right has consisted only in the right to exclude others from making, using, or vending the thing patented without the permission of the patentee, and that it gives the patentee no more than the exclusive right to make, use, and sell the invention. It does not destroy the right of the States to exercise their police power or the authority of Congress over matters within its Constitutional power. Congress has a right to deny the protection of patent rights to such covenants as come within the terms of the Clayton Act. It is argued that alternate forms of leases were offered by the United Company to the lessees, and that these leases under litigation have been chosen by the lessees instead; but the Court answers that this does not justify the use of the illegal leases that were before the Court.

There seems to be no charge that these leases were used oppressively. What the Court objects to is the fact that these leases gave the company power to act oppressively.

It seems to us that this is an instance in which the Supreme Court has proved its skill to guide law with safety through the tortuous channel of modern industry in such a fashion as to avoid, on the one hand, the rock of interference of private rights, and, on the other hand, the rock of arbitrary monopoly. Of course it is not the business of the Court to decide whether the law is wise or not; but, as case after case has shown, the Supreme Court, in determining what the law actually is, has had to exercise a discrimination between the law as mere words and the law as a living organism. In this case it seems to us that the Court has exercised that discrimination, and

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has discerned the truth that men in their relations with one another must be governed, not only by the statute, but also by the rule of reason.

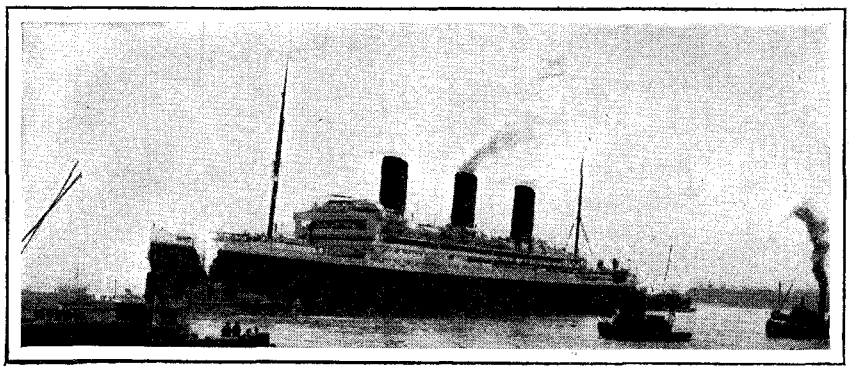
A COMMENDABLE JUNKET

A TEMPEST in a teapot has been stirred up in the United States Senate over the proposal of Mr. Denby, Secretary of the Navy, to take the surviving twenty-seven members of the Naval Academy class of 1881 to Japan on a transport in order to hold a reunion of the class in Japan at the invitation of Admiral Uriu, of the Japanese navy, who is a member of the class. Mr. Weeks, Secretary of War, is also a member of the class. The plan has been made by Secretary Denby, with the approval of President Harding, who believes that the acceptance of this invitation from Japan to this kind of an international reunion will be a contribution towards the growing friendship of the two countries and their mutual understanding.

Senator McCormick, for some reason which he has not made plain, introduced a resolution in the Senate protesting against the use of a naval transport and saying that the members of the class ought to go on a merchant vessel. His objection is evidently not based on the matter of expense, because we understand that he is ready to make an appropriation to carry the class to Japan on a merchant vessel. We hope the President and the Secretary of the Navy will ignore the resolution and will carry out their plan of taking these twenty-seven present and former members of the Navy on a Navy transport. It seems that there is a transport going to Japan on Government business, and that the reunionists can quite easily and properly be taken along. We only wish that they could go on one of our very best battleships instead of a transport. We can think of no better way of spending naval money than by sending a battleship on such a friendly and peaceful mission to the Japanese people.

A BEAUTIFUL MONSTER

IN his remarks before a large party of invited guests gathered at a luncheon on the Majestic in honor of her first voyage to America, Mr. P. A. S. Franklin, President of the International Mercantile Marine Company, jokingly said that he had been strictly enjoined by his publicity manager never to mention the Majestic by name without adding, "The world's largest ship." The new White Star ship is certainly that, for she is 956 feet long and her gross tonnage is 56,000, which is 2,000 tons in excess of the Leviathan—a name which we are glad to know is not to be changed because of President Harding's good taste and good sense.



(C) Kadel & Herbert

THE MAJESTIC, THE LARGEST TRANSATLANTIC LINER, ARRIVING AT HER DOCK IN NEW YORK CITY

Some other superlatives might well be applied to the Majestic as well as "big;" she carries comfort over into the domain of extreme luxury; her public rooms are more spacious than even those of her young sister the Homeric; she consumes eight hundred tons of oil a day in her twelvescore furnaces; she has the power of a hundred thousand horses; she has nine steel decks, elevators, an extensive swimming-pool, and is surpassed by none of her big rivals in decorative art. Moreover, her first voyage, in which no special effort was made for speed, averaged nearly 23 knots per hour and at times exceeded 25½ knots, from which her admirers are beginning to predict that her speed may come to equal her bigness and her luxury. They even speculate as to the possibility of her wresting the transatlantic time record from the Cunarder Mauretania, which has long been in the speed supremacy and in one run from Daunt's Rock Lightship to Sandy Hook maintained an average speed of 26.06 knots for four days ten hours and forty-one minutes.

Seagoers and sailors are inclined to prefer the fine lines of the old time and smaller ocean-goer to those of the new giants; even the Majestic's captain, Sir Bertram Hayes, at the luncheon already referred to, dropped a side remark of that kind in his speech accepting congratulations on his first voyage and his fine ship. But, if less delicate of line, the new big fellows (if one may call a ship a fellow) assuredly have massiveness and impressiveness, and their very bigness adds to their possibilities of pleasure-giving. There is always room for two classes of steamships to suit two classes of travelers—those who want the last word in hotel-like luxury and pay for it, and those who want comfort at moderate cost. This year's bookings to Europe from America have been taken up eagerly by both classes of travelers. There has been no indication in this direction of hard times or bad business.

FIRST PURE, THEN PURIFIED

BEHIND the pasteurization of milk in New York City, described by Mr. Rogers elsewhere in this issue, there is, as Mr. Rogers implies, a story which he does not tell.

The condition under which the milk used by little children as well as adults in the metropolis was produced, transported, and distributed twenty years ago would not be tolerated to-day. Little or no supervision was given by the city authorities, or by any one else acting on behalf of the public, to the conditions on the farms which produced the milk. The cows on a farm might be diseased, the stable might be filthy, the handling of the milk might be careless. There was very little control of the methods of transportation. Some of the milk which came from sources forty hours distant—some of it, in fact, came from as far away as Canada—might be allowed to remain during much of its journey in a temperature in which harmful germs would flourish. When the milk reached the city, it was distributed by methods which often not only permitted the germs in it to develop but made it inevitable that it would be tainted by new impurities.

Under such conditions, the little child which depended for its food upon this milk was helpless against daily peril, and adults were without means of knowing whether the milk supply they were giving to their children and using for themselves was a food or a poison.

As a consequence of the efforts of public-spirited citizens there was formed, under the auspices of the New York Association for Improving the Condition of the Poor, in 1907 what was known

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as the New York Milk Committee. The members of this Committee were all volunteers, serving without remuneration. Of this Committee at that time Mr. George W. Wickersham, later Attorney-General of the United States, was chairman. It was my good fortune to be permitted to serve as one of the members of the Committee.

Great pressure was brought upon that Committee to have it advocate as a policy the pasteurization of the city's milk supply. It was shown beyond reasonable doubt that such pasteurization would destroy the injurious effects of the impurities in the milk, and those who were impressed by the results of Mr. Nathan Straus's noble philanthropy which provided milk stations where mothers could get pasteurized milk for their babies were puzzled because the Committee did not at once agitate for municipal pasteurization. There was of course an element in the city which was ready to obstruct any reform on the grounds of expense, but that element had little effective influence in retarding measures for improving the city's milk supply. The reason why the Committee did not at first urge pasteurization was that if a dirty supply were pasteurized the city would acquire a sense of security that would make it seem unnecessary to have the supply made clean. The time for pasteurization was not to arrive until the city exercised its authority to insist that its milk supply should first be protected against dirt and germs. So the Committee set itself to work to develop methods for cleaning up.

In this early process of educating public opinion and the civic authorities to the need of inspection and control of the milk supply for insuring its cleanliness from start to finish no one gave more practical services than Mr. Loton Horton. As Mr. Rogers says, Mr. Horton has done service in working out a practicable method of commercial pasteurization, but we hope that his service during those earlier days in seeing that the milk which he now pasteurizes should come to the city clean will not be overlooked or forgotten.

There may be farmers to-day who resent the city's assumption of power to tell them how to care for their cows, how to milk them, and how to handle the milk; but the intelligent farmer to-day recognizes that because of the city's supervision the dairy business is on a basis of stability that it could never otherwise have obtained.

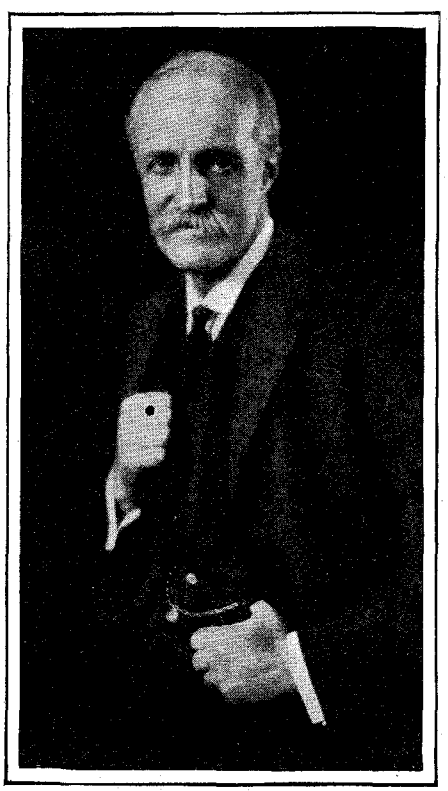
To-day the whole milk supply of New York City even before it is pasteurized is a more healthful food than any city's milk supply was a generation ago. This is because there were men who believed that dirty milk was unfit food, whether pasteurized or not.

The New York City mother who gives what is known as Grade B Pasteurized Milk to her child can feel safer than even the farm wife who gives to her child the milk from the farm's own cows. Because of the regulations enforced by the municipal authorities, New York City milk has a known proportion of butter fat, it is as clean as it is humanly possible for a milk supply to be, and whatever enemy has found lodgment in it has been rendered harmless. It is to-day, in spite of the cost of production, inspection, selection, and purification, not only one of the most wholesome and well-balanced of foods, but one of the cheapest as well.

ERNEST HAMLIN ABBOTT.

GIFFORD PINCHOT

THE nomination by direct primary of Gifford Pinchot as Republican candidate for the Governorship of Pennsylvania recalls the interesting and dramatic days of the Progressive party, of which Theodore Roosevelt was the founder and the leader. The contest in Pennsylvania was one between the Independents or Progressives with Mr. Pinchot as their candidate and the Republican organization with the Attorney-General of the State, Mr. George E. Alter, as their candidate. The organization was so strong in Philadelphia and in Pittsburgh that it believed it could overcome any majority for Mr. Pinchot in the rural districts. But William Flinn, the old organization war horse and Republican boss in Pittsburgh, who followed Theodore Roosevelt out of the Republican party and into the Progressive party, so successfully supported Mr. Pinchot that the supposed majority for the regular organization was cut down in Pittsburgh and Allegheny County by a surprising amount.



(C) Goldensky, from Keystone
GIFFORD PINCHOT

Mr. Pinchot's nomination assures his election, and means that under his administration the government of Pennsylvania will be carried on in accordance with standards of honor and integrity. The partnership in this extraordinary primary campaign between Gifford Pinchot and William Flinn is an illustration of loyalty and the possibilities of a union of practical politics with high idealism which has for those who know the two men an element of romanticism.

Gifford Pinchot is the founder and the personification of the conservation movement in the United States. He was graduated from Yale in 1889; went abroad and studied forestry in Europe; and, coming back, began the first scientific forestry work ever undertaken in this country on the great estate of Biltmore, in North Carolina. He entered the Department of the Interior in 1897 under the McKinley Administration, and in 1901, under President Roosevelt, was made Chief of the Bureau of Forestry. In his autobiography Mr. Roosevelt states that he had become interested in forestry while Governor and that he even then corresponded on the subject with Mr. Pinchot. When Mr. Roosevelt became President, Mr. Pinchot laid before him the plans for a great National conservation movement, which Mr. Roosevelt took up with his characteristic enthusiasm. The conservation movement meant not merely the saving of our National Forests, but the conserving of all kinds of National efficiency, including the material and moral man and woman power of the country. It is this conservation in its broadest sense which Mr. Pinchot represents. He is not interested merely in trees, but in the farmers, the farm women, the farm children, and the little red schoolhouses of the country.

He has been in so many lively political and administrative controversies and conflicts during his official life that a good many people have a wrong idea of his pugnacity. As a matter of fact, when he thinks it is his duty to do a thing he does it no matter what friendships may be broken nor what feelings may be hurt. But personally he is one of the sweetest-tempered, most friendly, most sympathetic, and most unassuming of men. He combines in rather an unusual fashion some of the qualities of St. Francis of Assisi and Richard Cœur

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de Lion. It is just possible that he will have a harder time with Pennsylvania than Pennsylvania will have with him, because his standards and abilities are so high that it is difficult sometimes for him to be patient with the defects and lack of energy in the average man and woman. But he is certainly not going to be an unpractical idealist as Governor of Pennsylvania, for he has had long administrative experience and has shown great administrative capacity.

It is a fine thing for Pennsylvania and the country, to say nothing of the Republican party, that the Republicans of Pennsylvania have chosen such a man to be their standard-bearer.

IS THERE NO PROTECTION?

WHEN the United States Supreme Court decided, as we reported last week, that the Federal Child Labor Law was unconstitutional, it decided something more than the question of child labor.

Perhaps, in the light of its previous decisions, the present decision was inevitable. A former law had excluded from inter-State commerce goods made in factories employing children contrary to provisions embodied in the law. This the United States Supreme Court declared to be invalid, because not within the Constitutional powers of Congress. Then the framers of that law decided to undertake to employ the taxing powers of Congress to the same end, and therefore drafted a measure which laid a tax upon such goods as the former law had declared non-transportable. As the layman understands it, it is on the ground that this attempt to use the taxing power is but a subterfuge to prevent child labor, and that the business of regulating or preventing child labor is not within the province of the Federal Congress, but is reserved to the States, that the Supreme Court, speaking with the voice of Chief Justice Taft, has rendered this law void also. It is reasonable, it seems to us, and we think it will seem to most people, to conclude that if Congress has no power to exclude child-made goods from inter-State commerce it has no power to put the burden of a tax upon them. The power to tax is power to destroy, and if destruction by direct prohibition is unconstitutional, destruction by taxation would seem to be unconstitutional likewise.

If this was only a question of child saving, the problem left by the decision of the Supreme Court would not seem to be insoluble. We must recognize that there are certain things which the Nation as a nation cannot do. Among the dearest of human rights, there are many, including the right to life itself, which under ordinary circumstances are intrusted to the protection, not of the Nation, but of the States. The fact that the right to childhood is a precious right does not necessarily mean that it must be safeguarded by the laws of the Nation.

There is, however, a right which under this decision of the Supreme Court seems not to be safeguarded.

South Carolina, let us suppose, has an enlightened child labor law. The fact that it has not such a law does not interfere with our supposing that it has. It may have some day, and we hope it will; and when it does it will find itself in this case. The result of that law is that the cost of labor in its manufactures is higher in South Carolina than it is in the neighboring State, let us say, of Georgia. What can South Carolina do? If it were a fully sovereign nation, it could protect itself against the unfair competition of Georgia by levying a tariff to cover the difference in cost of production. By the Constitution, however, it is prohibited from doing that. So South Carolina appeals to the Federal Government and says: "You forbid me to protect myself; therefore I appeal for protection to you. Forbid the goods of Georgia, made cheap by child labor, to go across my frontier, or else put a tax upon them that will do what I would do by a protective tariff." And now the Supreme Court says: "No. You cannot protect yourself, and you cannot be protected by Congress. You have to pay the penalty for having been enlightened. You have to suffer because you choose to safeguard children's rights. The privilege of enacting child labor legislation is reserved to the States, and it is to be exercised by them at their industrial peril."

It is the theory of the law that for every wrong there is a remedy. What is the remedy for this wrong? We wish some Constitutional authority, who could speak with the same assurance that the Supreme Court has spoken, would tell us what it is.

PAINTINGS AND PEOPLE

THERE are a great many excellent paintings in the world. There are also a great many excellent people. The two ought to become better acquainted.

At the present time many of the pictures hang unseen in artists' studios or are stacked in piles awaiting those hopeful moments when they are inserted one after another in the artist's best exhibition frame, on the great easel in the corner of his studio. Only too often, as artists know, the procession of pictures marches back to its stack again without any break in its ranks. The studio visitor may have greatly desired to love, honor, and cherish one of the briefly glimpsed pictures. But there are certain formalities in this material world which must be attended to before such a consummation can be realized. The most important element in these formalities consists in the passing of a check from the observer of art to the creator thereof. But checks do not grow on bushes, nor are there trees, in this climate at least, which fruit with three-square-meals-a-day. Both of these facts add greatly to the difficulties of the would-be consumer and the producer of art. There are many more people who like paintings than have the money to buy them.

So far as we know, one of The Outlook's friends has pioneered in an effort to solve this problem—a problem which possibly dates back to the days of Phidias. Not long since an artist of his acquaintance dropped in for an evening's chat. They started discussing the market for pictures, and our friend took the artist to task for his lack of business acumen.

"The trouble with you artists," he said, "is that you are a lot of misers. You are like men who hoard their money in an old sock stuffed away in the eaves. You ought to make your capital productive. Now take your own case. You have twenty or thirty pictures piled up in your studio, and I'll wager you won't sell more than three or four during the coming year. Why don't you rent the things and let them bring you in an income instead of doing nothing but collecting A1 samples of New York dust?"

"That's a grand idea," said the artist, "but who would we rent them to?" Lest the eagle eyes of The Outlook's proofreaders modify the foregoing sentence by adding an "m" to who, the editors of The Outlook wish to state that the artist did use the nominative form and, in the interests of that strict accuracy for which we hope we are famous, the "m" must remain mute. The artist of whom we are speaking generally, we believe, uses correct grammar, but we should recollect that his excitement at his friend's proposition was doubtless intense. This moot question being settled, let us return to the friend.

"I will," said the friend, with all the responsiveness of one of the chief participants in the story of cock-robin. "I will. Send me down that painting I looked at yesterday and I'll give you six per cent of your asking price for the privilege of hanging it on my walls for

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a year. I'll insure it, and if I like it after living with it I may buy it when the year is through. Or I may rent another picture from you when the year is up. Whichever I do, you will be earning six per cent on your investment of brains, and that is more than some people get out of the stock market."

The idea seems to have possibilities. At the rate which this story suggests, a man might have a very well known picture in his house for a year for less than the upkeep cost of an automobile. He might have an illustrious painting in his house for the week-end for a comparatively small sum. On such an occasion he might issue cards to his friends announcing that—

Mr. John K. Jones
will receive at his home
on the
second Thursday in June

and in the lower left-hand corner of these cards of invitation have inscribed—

To meet Sir Joshua Reynolds

Such an invitation would of course involve the co-operation of art dealers, who, we have noticed, are not averse to earning an honest penny. But perhaps the plan is most applicable to modern art. It would put the best of to-day's paintings in reach, at least, of the comfortably well-to-do, and the leaders in the second flight within the reach of almost any one who owns a Ford. As Henry knows, this would include a large majority of the population of the United States.

A CITY STREET

BY HARRY LEE

I

THAT there were trees
In Orchard Street,
Song birds upon the bough,
Blue violets among the grass,
Seems past believing now.

II

But even so in Orchard Street
They know that May has come—
By window-sill and crowded stoop
Bee-like, the voices hum.

III

A flower wagon trundles by,
A hurdy-gurdy plays,
And beauty comes to spirits there
In many mystic ways.

IV

For there are dreams in Orchard Street
And cooling winds and rain—
And love and pity and the peace
That follows after pain.

V

And fluttering hosts of children there,
Fragile and pale and sweet—
Ah, beauty finds a fadeless May
In barren Orchard Street!

A PILGRIM IN THE ANTHRACITE REGION

BY HARRY HIBSCHMAN, LL. D.

IT was the morning set for the beginning of the coal strike, and I was sharing a seat in the stuffy smoking-car with a salesman traveling for a shoe concern. As the train twisted around through the mountains, following an inky stream, with here and there a pond of black slime and everywhere huge banks of culm, he complained of the timidity of the merchants and the slimness of his orders; and, typical of his kind, he needed only a listener to swing into an airing of his views regarding the strike.

"See those black piles out there," he said, bitterly; "that stuff's been lying there for twenty years or more, but they are washing it over and mixing it with the good coal, so that for every ton of coal I buy in Philadelphia I get ten per cent of that dirt and slate. But what can you do about it? There's only one place to get hard coal, and you take what you can get and pay the price."

"Whom do the merchants sympathize with? Why, the miners, of course. They know the truth about the business. They know what kind of life the miner leads; they know that he only works three or four days a week; they know that his wages are only a small part of the price of coal; and they know the operators. I haven't a customer who doesn't want the miners to win."

A few hours later I sat in a barber's chair. One question was enough to start him going.

"Do I know anything about the strike? Well, I guess, yes. My father-in-law's an engineer at one of the mines. He's worked there fifteen years; and I was raised right here myself. Say, man, I know this mix-up from the surface to the deepest workings. And the miners are getting all the dirt in the deal. The contractor makes good money sometimes, and when the bosses give out the figures it looks big. But they don't tell about the many who make much less. And they don't tell about the danger, neither. For the contractor's work is robbin'—removin' the pillars; and, you take it from me, that's chancy work. He has to pay his helpers whether he makes it or not. He takes the risk and deserves to make something.

"How much? Oh, a laborer gets about four seventy-five a day underground and about four fifteen above ground. But they only average about four days a week. You can't bring up a family on that; and lots of them get along only because they have daughters in the factories. For instance, my wife's sister snakes home an average of eighteen dollars a week. Her folks don't need it like some of the rest, but many couldn't get along without it.

"More expensive to mine now! Who says so? Why, just think a moment. They used to run their cars with mule power, and one mule hauled at most two three-ton wagons. But now an electric motor pulls fifteen to eighteen

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loaded cars or perhaps twenty-five empties; and just imagine how much faster they go! More expensive! That's sure the bunk."

I called on a banker next. After discussing other things, I asked, as if but casually interested, "By the way, what is the right or wrong of this strike?"

"The same story as everywhere else," he answered promptly and with the utmost assurance. "Labor, spoiled during the war, is trying to hold up the owners and the public, which always pays the bill."

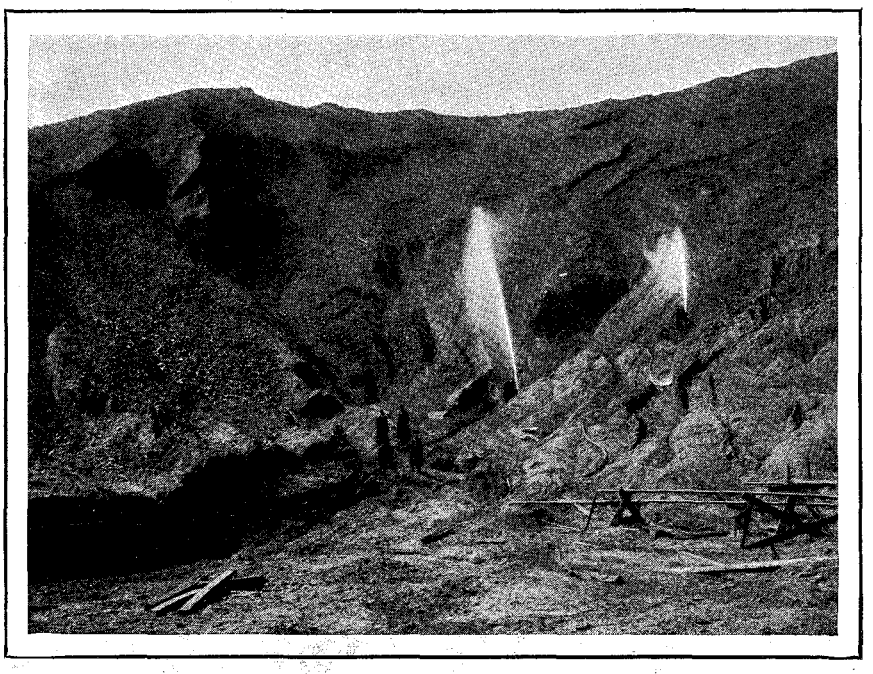
"But what about the claim of forced idleness and consequent low yearly average?" I inquired.

"It isn't true here," was the answer. "During the last five or six years work in this section has been comparatively steady. The men have had about all the employment they wanted. You must bear in mind that they take many more holidays than most of us. They have all sorts of church holidays in addition to the others. For instance, they never work on Monday after Easter. And today they wouldn't have worked even if there had been no strike. They would have observed it as the day on which the eight-hour day went into effect in the mines. And so it goes. They have averaged at least five days a week in this district. That's five eight-hour days. Now they are asking five six-hour days for the whole industry at the same pay.

"As to what they are earning," he continued, "I'm in a position to know something about that. And I tell you they are doing well. If you doubt it, look around on the street to-morrow at church time, and you'll see the same clothes you would on Fifth Avenue or on Chestnut Street. The contract miner's checks are hardly ever under eighty dollars for two weeks, and they are often as high as a hundred and fifty. An outside laborer gets about five dollars. Underground he gets about six. And that's the minimum. Every one else gets from that on up; and seven and a half to ten dollars is more nearly right for loaders and others.

"The worst feature of the business is that the miners are insisting on dealing with the coal industry as a whole. Not only is there a great difference between the anthracite and the bituminous industries, but there are marked differences in different sections of the anthracite regions. These should be considered in fixing wages and conditions of work. It is not for the interest of the general consuming public to have the whole industry administered and regulated on one common basis. Under that system the public pays according to the cost of production in the poorer and more expensive mines and gets service according to the standard of the least efficient workmen.

"Another thing to be remembered is that it is as much to the benefit of the operators as it is to that of the men not to have the mines idle, for the pumps must be kept going just the same, and the workings must be kept cleared and in a condition of safety. About twenty tons of water must be handled for every ton of coal even when operating. That water is there just the same to be pumped on days when no coal is mined. All that goes into the price of coal. And the operators are not making an unreasonable profit."



"SEE THOSE BLACK PILES OUT THERE! THEY ARE WASHING THAT STUFF OVER AND MIXING IT WITH GOOD COAL, SO THAT FOR EVERY TON OF COAL I BUY I GET TEN PER CENT OF THAT DIRT AND SLATE"

From the bank I went to the office of one of the leading lawyers, making the excuse that I wanted to use his library, being myself a limb of the law. After I had been digging around a while, he sat down with me and of his own volition brought up the subject of the strike. When I quoted the banker, he laughed and commented:

"Well, we would hardly call him a disinterested witness, for he owns a lot of stock in one of the non-union districts of West Virginia. Still, there is much truth in what he said. The miners in this section have been making fairly good money and certainly do not need an increase. In fact, I am satisfied they don't expect it, and only asked for it to have something to dicker with. They would accept the old rate quickly enough.

"But it isn't simply a question of good wages according to the general standard. You've got to bear in mind that a miner's life is short. Have you ever had asthma? Well, no man can expect to work in the coal mines twenty years without suffering the tortures of the damned because of the black dust he has to breathe every minute he is on the job. And then there are many other dangers. Perhaps you noticed the cripple half lying on the sidewalk just above this building—a pitiful object, footless, with one hand gone, and half blind. That's Exhibit No. 1. Walk down to the post office, and you will pass two more. They are victims of the mines, and the risk was their own. They received no compensation. As a lawyer I am rather calloused, I presume; but I tell you that I'm convinced that any man who takes the chances with his life and limbs that the coal miner does, certain at best to shorten his years to an appreciable extent, deserves the highest pay and, in addition, that the industry take care of him when he is no longer able to work.

"One thing that stands to the discredit of the operators, in my opinion," he continued, "is the fact that they shun publicity. If it is a fact, as they claim, that the price of coal is high because of the wages paid, why don't they produce the records? Living right here and engaged in the practice of my profession for many years, I have never seen positive evidence of whether they are making money or losing. But my guess is that they have made enormous profits. If not, why don't they let us see the books?"

On my way to the station I passed a bootblack stand and climbed into the chair. While I sat there some passer-by called the energetic shiner "Tony." So as I paid him, I asked, "What do you think about the strike, Tony?"

There was a twinkle in his eye as he answered, "One damn fina leetla Apreela Fool joke!"

I wot Tony was right. But the lawyer's words implied the real need of the occasion—it is, light in the dark places.

Unless coal property counts more than humanity, unless a part is mightier than the whole, unless the Government is impotent—let Congress get *the facts*, *the truth*, and then *act*.

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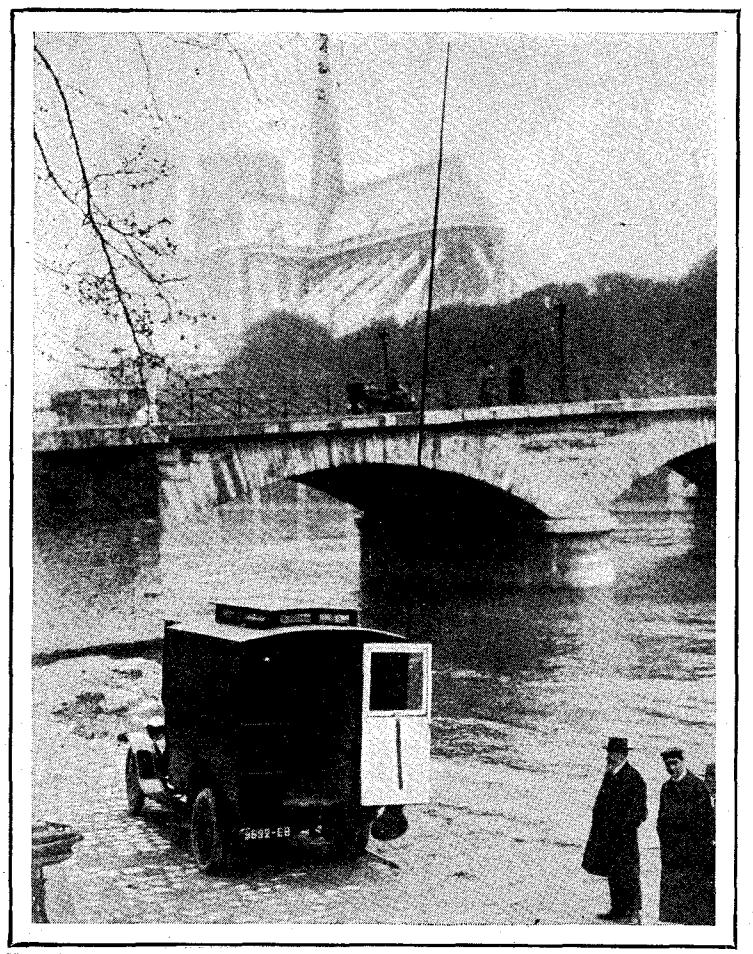
Wide World Photos

A MAY DAY LABOR PROCESSION IN LONDON

The picture gives a view of the labor procession along the Thames Embankment, with a huge portrait of Trotsky in the lead and with Communist banners following, indicating the popularity of Socialism and Communism among the labor element in London



Keystone

POLICE AUTOMOBILE IN PARIS EQUIPPED WITH A RADIO OUTFIT

The operator is busy at his instrument in the interior of the car, while the antenna may be seen aloft at the back. The view is taken at the rear of Notre Dame Cathedral, which is seen in the background, over the Pont de l'Archevêché

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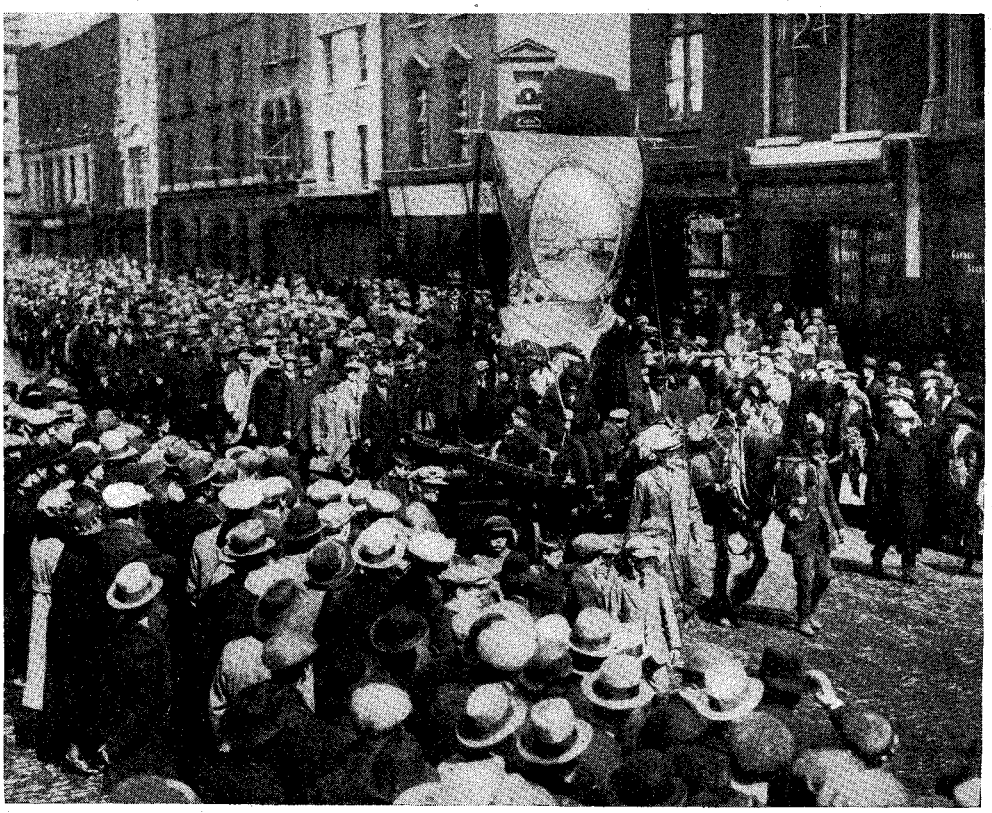
IN THE MERRY MONTH OF MAY"

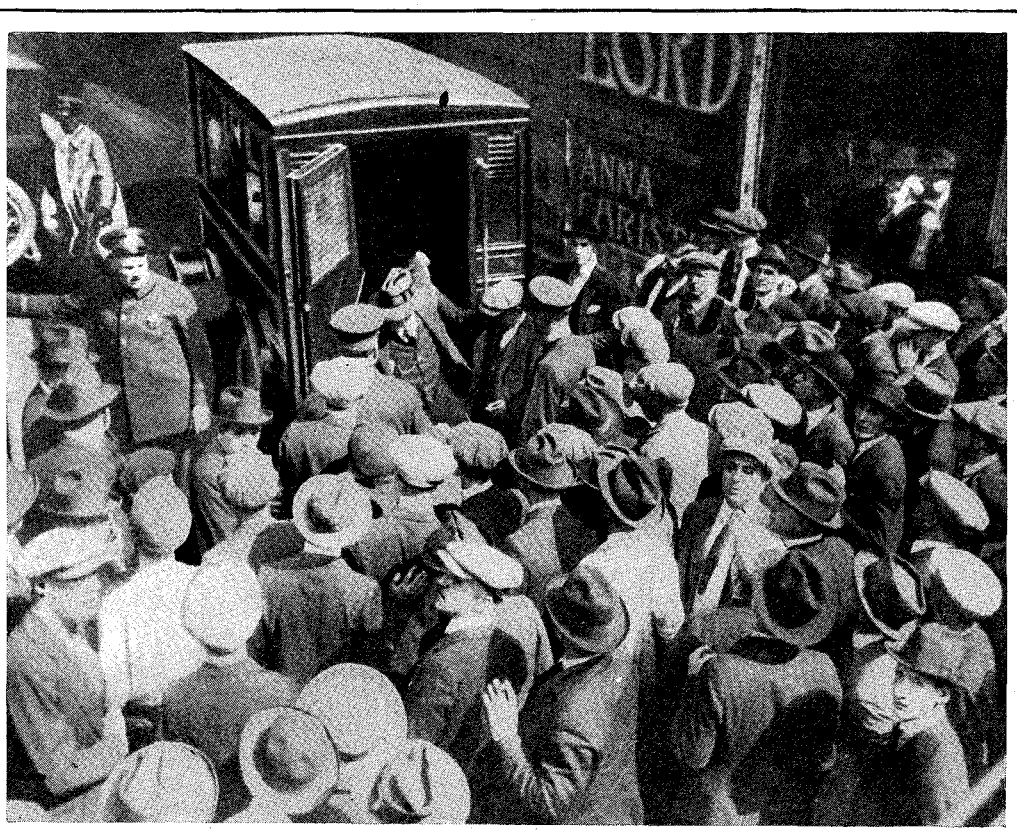
—Richard Barnfield.

AN IRISH LABOR PROCESSION IN FAVOR OF PEACE

As a protest against factional war, the Irish Labor Party called a national strike in Southern Ireland a few weeks ago. For one day there was a complete stoppage of work. There were no trains, no telegraph or telephone service, and a Dail Eireann meeting that was scheduled for the following day had to be postponed, as the members could not travel. The photograph shows a view of a demonstration in sympathy with the movement against factional fighting marching through O'Connell Street, the principal thoroughfare of Dublin, the Irish capital



Wide World Photos



P. & A. Photos

CHICAGO ROUNDS UP GUNMEN IN LABOR WAR

More than two hundred suspects, including labor leaders, were arrested in Chicago following the killing of policemen at the hands of gunmen. The photograph shows a patrol wagon being emptied of its load of suspects at the detective bureau

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TEN-HOUR DAYS FOR PLANTS

BY LEWIS EDWIN THEISS

A TROPICAL SORGHUM

Left to right, exposed to ten-hour day, thirteen-hour day, and full summer day length. Having always been accustomed to short days, this plant not only is prevented from flowering but even growth is greatly checked by the long summer day of our latitude. Note that this plant comes from a very hot region, hence it cannot be the excessive heat of our summer days which interferes with growth

WE have it on the best of authority that we are to know the truth and the truth is to set us free. But it is altogether probable that our idea of what that freedom means is as yet quite as nebulous as our knowledge of the truth itself. The fact is that only within a comparatively short time have we known much about the truth.

A little while ago Watt observed that steam had power to lift the lid of a tea-kettle, and as a result of his knowledge of the truth to-day we post o'er land and sea with the speed of the wind, in conveyances palatial. Some time later another observer noted the fact that gasoline under compression will explode; and as a result of that man's comprehension of the truth to-day we ramble the earth over in our comfortable motor cars and fly through the air like birds. Then some one else observed that sounds move through the air in waves; and because we knew the truth we are free to-day to talk to one another at great distances through empty space. Now comes another conception of truth; and as a result of that knowledge we are free to have the Christmas poinsettia on our tables in August, to adorn our living-rooms with iris blooms in midwinter, and to have the finest of spinach in the dead of summer. Assuredly the truth is wonderful; but more wonderful still is the freedom that comes from it.

When we think of all the truth man has discovered concerning agriculture in the past half-century, it seems strange that not until now should he have learned that plants flower and fruit because they receive definite periods of light daily; and that when these periods of illumination are artificially manipulated we are free to have plants in blossom at practically any time we choose, even though, as in the case of the iris blooming in winter, such a thing has never been known before.

We have long understood the truth that every effect must have a cause. And yet until W. W. Garner and H. A. Allard, physiologists of the United States Bureau of Plant Industry, recently began to search for the cause that produced the effect of flowering and fruition in plants we had absolutely no conception of the underlying reason for this reproductive miracle. As Topsy just "growed," so, in the minds of most of us, this just "happened."

The investigations of these men and their co-workers grew out of their observation that, outside of the tropics, different plants almost invariably flower and fruit only at certain definite seasons of the year. Thus the arbutus blooms in early spring, as do the service-berry, the adder's-tongue, and a thousand other familiar plants, and almost invariably they bloom only in the spring. Comes summer, and with it blow the daisy, the Oswego tea, the day lilies, zinnias, and others. With autumn we find the asters abloom and chrysanthemums and altheas and witch-hazel. And since time began, so far as we know, these plants have always flowered in this order. But why they always flowered in this order we never even guessed until Messrs. Garner and Allard began to probe into the cause.

There are many plants, like our common annuals, that grow for a season and die, root, stock, and branch. Only if they mature seed can these species avoid extermination. It is a natural conclusion, therefore, that the entire activities of such a plant are directed toward this means of propagation, all other growths being but secondary to this means of propagation. These scientists tell us that this is not so. They tell us that plants merely inherit the capacity to flower and fruit in response to given conditions. And they tell us further that, lacking these conditions, there can be no flowering or fruiting, even though growth should continue indefinitely.

Temperature is not, as most of us would instantly assume, the ruling factor. To be sure, there must be a certain amount of heat before there can be any growth at all; and of course there is a degree of heat beyond which plant life cannot exist. But, aside from these limitations, the matter of heat seems to play little part in plant growth and reproduction. This is shown by the fact that, even when appropriate temperatures are provided out of season, as a rule flowers and fruit fail to appear except in their regular period.

The common iris, which ordinarily flowers in May and June, will not bloom in winter in the greenhouse, even when the temperature of May and June is duplicated. Again, some plants that normally bloom in the cool of autumn will also bloom in the hothouse in winter, showing that the cool fall weather has nothing to do with the matter of flowering. Such a plant is the cosmos. But behold! if plantings are made after a certain date, though the temperature be even the year round, the plants so started will not bloom, but will continue to grow without blossoms until the following fall, the normal season for the cosmos to bloom, meantime reaching gigantic size. Then flowers will appear. So it is evident that some cause other than temperature is responsible for the flowering of plants.

In some way, it is clear, the time of flowering and fruiting in many plants is inseparably linked with the advance of the seasons. The matter of heat eliminated, there remains but one other factor that changes regularly with the advance of the seasons. That is the matter of the daily period of light. In the latitude of New York, for instance, the short days of the year are about nine hours in length. The longest days exceed fifteen hours. Year after year this change occurs with mathematical precision. December 21 is always a day about nine hours long. June 21 invariably has something more than fifteen hours of natural illumination. And any given date between these days always has a given amount of daylight, year after year. On a given day it is ten hours. Another given day has eleven hours. A third date has twelve hours of darkness and twelve hours of light. So it goes, year after year.

To see whether or not this varying length of daylight really plays any part in the flowering and fruition of plants, these scientists of the Bureau of Plant

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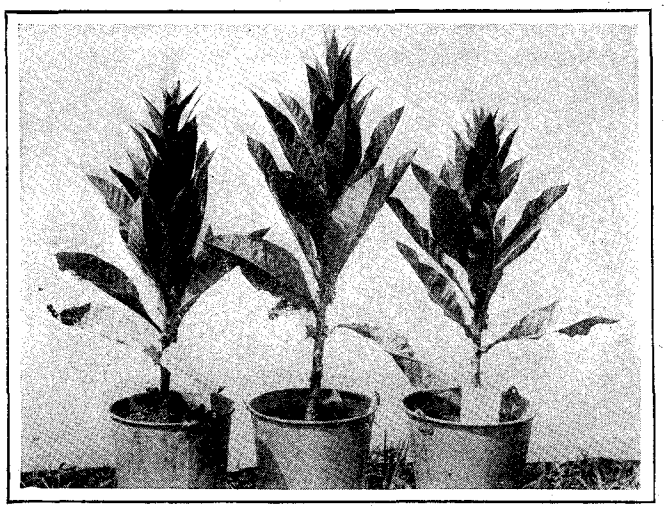
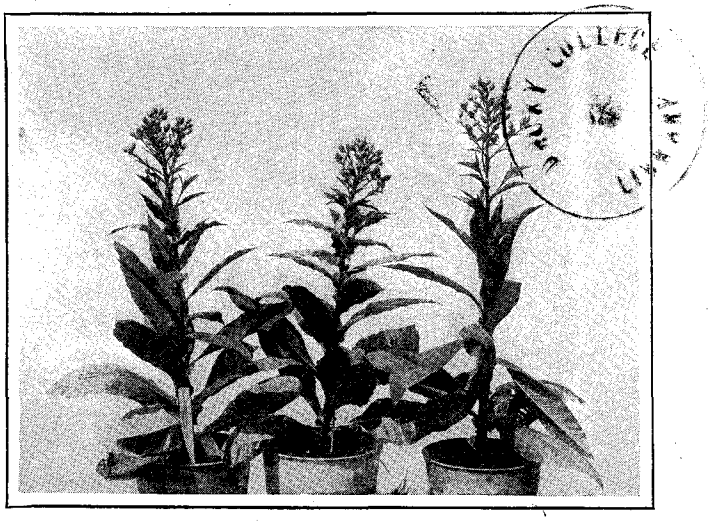


MARYLAND MAMMOTH TOBACCO DOES NOT FLOWER IN OUR LATITUDE DURING THE OPEN GROWING SEASON BECAUSE THE DAYS ARE TOO LONG



MARYLAND MAMMOTH TOBACCO FLOWERS READILY IN SUMMER IF THE DAY IS SHORTENED TO TWELVE HOURS

Industry had "dark houses" made, which would admit air freely but no light. By growing plants in containers on easily moved trucks, it was possible to shift them into and out of the dark house at will, thus regulating the number of hours of daylight received by any given plant. By growing duplicate plantings in permanent outdoor beds, it was easy to see how the dark-house plants grew in comparison with those growing under normal conditions.

The soy bean gave a very striking reaction. The variety Peking, for instance, required sixty-two days to reach the blossoming stage when grown normally in the open. But the plants that spent part of each day in the dark, getting but seven hours of daylight out of each twenty-four, flowered in twenty-one days. A common wild aster, which ordinarily flowers in September, behaved in the same way. Grown normally, it required 122 days to blossom. Given but seven hours of light daily, it flowered in 36 days. So it was discovered that these plants make their flowers and form their fruits at given times of the year because of the daylight period that goes with those dates. Approximate that period of daily illumination, and the plants will make haste to bloom.

So were produced the matured Christmas poinsettias in August. The daily light period was decreased until it approximated that of the Christmas season, and behold! the poinsettia matured its brilliant red bracts. So with the chrysanthemum, the flower of fall. When the daily light period was reduced to the length of the autumn days, behold! the chrysanthemum hastened to bloom.

So it goes with many, many plants that bloom in the short days of the year. Give them a day artificially shortened, and promptly their energies are turned toward reproduction. Necessarily of course the shortening of their growing period tends to reduce their purely vegetative processes and results in lessened growth.

But what about the flowers, like the iris, that normally bloom when the days are longest? Reducing the daylight period could not and did not throw them into bloom. But lengthening the daily period of illumination during the short days of winter did!

Now, there are many flowers that we grow out of doors in summer and in the hothouse in winter. But the iris has never been one of them. Put it in the hothouse and exactly duplicate the temperature of June, and the iris remains only a dormant plant of sword-like leaves. But put it in the hothouse in winter and lengthen the daily period of illumination to correspond to the days of June, and lo! the iris comes to life, shoots up a flower stem, and blooms. That is what Mr. Garner and Mr. Allard did. They put iris plants in an unlighted hothouse with the temperature of summer, and they had iris plants all winter—and nothing more. But when they put other iris plants in another hothouse with a similar temperature, but with more light, they soon had flowers as well as plants.

To be sure, they had no light as powerful as the sun to turn on. In fact, they had only relatively weak electric lights to turn on. These were strung overhead, and the degree of illumination was only three to five candle-power at the surface of the soil, whereas winter daylight may reach the intensity of 5,000 candle-power or more. And yet this insignificant light was sufficient to stir the iris plants to life. The lights burned from sunset to midnight each day.

So it was discovered that plants may be roughly grouped in two classes, short-day plants and long-day plants, with a great host of intermediates, which seem capable of blooming under quite widely varying conditions.

This is the truth. But what of the freedom that is to result from it? Who can say? When Marconi succeeded in flashing his first message across the English Channel, who could foresee the 600,000 wireless telephones of to-day and the millions of to-morrow? Who ever dreamed of the nightly clatter in the air—concert and lecture and speech and opera—that now fills the nocturnal ether?

When Watt perfected the steam-engine, who ever conceived, even faintly, the incredibly vast uses of his invention—the rushing ocean liner, the roaring express train, the huge and endless factories, all built on a steam-puffed kettle cover?

And now that we know, even so faintly, the truth about the flowering and fruition of plants, who shall say what freedom may not come of it? One thing is certain: It means a new race of plants. It means that products the world has never seen before will shortly come into being. Florists and horticulturists and agriculturists will now be able to hybridize plants that could never be crossed before because they did not bloom at the same time. Now they can be made to bloom together. New crosses of all sorts will now be possible. And just as in 1922 we have the radio telephone that was not even dreamed of in 1900, so a quarter, a half of a century hence we shall have plants we now know not of, and we shall have a new agriculture based upon these plants and upon the findings that investigators will make concerning our common farm crops. Wonderful, indeed, is the freedom, the enlarged life, that is born of truth.

DO you know that you are a stockholder in a corporation that is losing $50,000,000 a year? Newton Fuessle has interviewed its chief executive for The Outlook. The business he manages is your business. Naturally you will read Mr. Fuessle's forthcoming article with interest—self-interest.

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INTERCOLLEGIATE ATHLETICS

THE UNDERGRADUATE TAKES A HAND IN THE DISCUSSION

CONCERNING the question of intercollegiate athletics there has been much talk. College presidents, educators, athletic directors, and sport writers have all had their say on this mooted subject. So far as The Outlook has been able to observe, very little attention has been paid to the opinions of those most concerned in the success or failure of intercollegiate athletics—the undergraduates themselves.

That is why The Outlook offered ten prizes for the best discussions of this problem, and limited its contest to undergraduates of American colleges. Our hopes of securing valuable and representative opinions through the medium of this contest have been more than justified. We think those who read the first, second, and third prize letters, which we published in last week's issue of The Outlook, as well as those who read the Fourth Prize letters, published in this issue, will entirely agree with us. We expect to publish still another installment of these representative letters in an early issue of The Outlook.

We wish that our public men could always keep their feet as firmly on the ground of common-sense idealism as have the majority of the undergraduates who entered our athletic letter contest.—THE EDITORS.

A LETTER WHICH BONED MUCH BOOTLICK WITH THE OUTLOOK

"OH, optimism, thy name is Outlook." Doubtless you will reap a voluminous harvest of undergraduate opinion when you seek it upon such a vital subject as sport, but the mere idea of expecting any two undergraduates to agree upon any one subject argues forgetfulness of the editorial college days.

However, most of us can get together on a few broad generalities, such as the following: Athletics means football, undergraduate opinion means that of "my own little circle," and general college opinion is that of "my Alma Mater," which is different from (and therefore superior to) all others in existence.

Now, flaunting these definitions, let me leap down into the arena of undergraduate opinion and add my bit to the turmoil therein.

First, I'm a West Pointer (and prouder of that title than I'll ever be of any other). Now here at the Point we have universal compulsory athletics, and every cadet plays baseball, basketball, lacrosse, soccer, tennis, polo, and hockey, and of course, football, some time during his career. Since I have seen it in operation I do not hesitate to claim that the place of athletics is that of a compulsory subject in the curriculum, and inferior to no other subject, because it breeds the good health which is the prerequisite of all successful study.

When all men engage in a sport, we find that the competition for the varsity is keener, and so the emphasis placed upon the sport as such is redoubled. If this emphasis is properly handled, it can do no harm, for strict scholastic requirements keep the academic work from deteriorating. West Point goes crazy over football, but she doesn't sacrifice her academic standing upon its shrine. Her enthusiasm is shown by the fact that the best students in each class are "turned out" by their classmates and often sit up half the night frantically coaching the men on the football team during our justly famous (or infamous) examinations.

What are all these men after? Victory? Yes, but only if fairly won. We believe in our motto: "Back the team—play to win—but play fair." Undue emphasis upon victory as such means only one thing: the ultimate justification of cheating. We don't believe in that, and it can only present a problem where there is a fundamental defect in the spirit of the entire school. Army-Navy Games are fought to the limit, and a Navy victory puts all West Point in mourning; but we'd rather mourn such a glorious defeat as that of last November than to celebrate a victory won by unfair means.

This spirit of fair play, which every school should have, bars all athletic scholarships and professionalism. It should forbid proselyting (except in actual cases of honest transfer, which can be judged by a lively school conscience). The school conscience should be double-action, but often isn't—that is, it should as quickly criticise "our team" for cheating as it does that of the enemy.

Finally, we admit that the part of the undergraduates *en masse* regarding the coaching of the team, the formation of its schedule, or the eligibility of its members should be limited to standing around and fiercely criticising the men who are responsible. This is a favorite amusement of all undergraduates and does no harm to any one. It also keeps them out of mischief. By all means let it continue. The team, like the size of the Army, is the business of all citizens, and they should be permitted to attend to it just as long as they limit their attention to talking and do not get in the way of the busy men who are responsible for these things.

Sport writers we condemn impartially, because they always misspell the name of our particular All-American candidate, but we continue to mob the newsstand on the morning after every game.

So now I'll emerge from the arena, still shouting and unconverted, and firm in the conviction that we want sport, that we need sport, and more sport and clean sport as well, and that Army can whip Yale, Notre Dame, and Navy—especially Navy—any time the luck breaks even.

Cadet Ducrot,[1]
United States Military Academy,
Class of 1924.

A SIMPLE AND EFFECTIVE SYSTEM

AT M. I. T. we have a system of athletics run by the students and for the students. There is little, if any, outside control, and no possible taint of professionalism. As a result the grade of sportsmanship is unusually high and the benefits widely distributed. Because I believe our system could be adopted by other large colleges for the best interests of college athletics, I will set forth some of the fundamental ideas which govern it.

"A sound mind in a sound body" might well be our motto. We believe that scholarship should not suffer, but rather benefit, from athletics. The Faculty does not strew the path of the athletic star with roses. He must show his right to competition by first passing all his subjects. It has been demonstrated that the scholastic standing of team men is above the average of the school. So much for the sound mind.

The sound body is attained by a constant policy of giving the most exercise to the most men. We view our teams from three angles. Primarily, they must encourage and furnish exercise to as many students as desire it. Secondly, they must be successful in showing that Tech men are real fellows with the highest grade of sportsmanship. Thirdly, they must add to our prestige through being as successful as possible.

The entire direction of athletics is intrusted to a student association. There are junior managers and team captains

[1] The modest author of this letter has chosen as a pen name a word which, in the slang of the Point, is a synonym for a fourth classman or for anything the name of which is unimportant or momentarily forgotten. We may add that we have used as the title of his prize winning effort a phrase stolen from his letter thanking us for our check. We trust that we have used the phrase "cold."—The Editors.

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who comprise the Association. The officers are elected from the juniors of the previous year. The continuity is maintained by an Advisory Council of alumni, all former athletes of Tech, who act in a purely advisory capacity and receive no compensation. Contrary to most large universities, there is no graduate manager or paid coaches whose jobs are dependent upon winning teams, and who influence the athletic policy of the school teams.

Athletics are financed through a student tax of $2.50 per man. This is very low as compared with other colleges. A revenue of less than $8,000 is thus obtained on which to run fourteen varsity teams in addition to the twenty class teams. As payment of the tax entitles a student to free admission at all contests, gate receipts are small. We do not handle the spectacular varsity football and baseball teams which are usually able to attract enough gate receipts to maintain all the other sports. Although we only had $8,000, we were able to handle 1,671 men who came out for teams and to finance 189 meets. As a result we have necessarily attained a high standard of efficiency in management. That is best illustrated by the annual cost per man carried on the squad—track, $7; crew, $8.25—and the fact that 1,671 men tried out for teams. That is a record in economy and efficiency which is unparalleled.

There are no hired managers, no hired athletes getting as much as an athletic scholarship, and only one coach who has a steady job as physical director. There is no possible chance for commercialism, and, on the other hand, we as undergraduates benefit from the experience of guiding our own affairs. We come out with a greater pride in our college, a greater confidence in ourselves, a knowledge that we have played the game for the game's sake only, and withal we turn out teams as successful as the next college.

All this I believe might be attained by other colleges through scrapping their highly paid and artificial system of graduate managers, salaried coaches, and endowed athletes. Make athletics an undergraduate affair for the benefit of undergraduates, and not an expensive system of spectacular entertainment for the jaded public.

W. W. Bainbridge, Jr.,
Massachusetts Institute of Technology,
Class of 1922.

GIVE COLLEGE GIRLS A SHOW

Since I am a girl, a freshman at that, and just eighteen, you may think I have no business to write about college athletics at all; but I am interested in women's college athletics and anxious to see them encouraged. The head of the department of physical culture for women would say that we have a perfected system here. "Why," she would tell you, "our women have a chance to win their 'M's' as well as the men." That is all very well, but the fact remains that, while there are practically as many women as men at Minnesota, over fifty men have been awarded the coveted M this year and only one woman. The reason for this is evident. Athletics are not made sufficiently attractive to women in colleges to make it worth their while to compete. In the first place, age-old prejudice exists in regard to women being indecently clothed while exercising. Girls' clothes hinder athletic activity. Women are not permitted to participate in athletic events unless they wear full, baggy bloomers which have a binding rubber just above the knee. I remember my own chagrin when I lost a high jump because my bloomers touched the rope. What man athlete would tolerate such a hindrance while he was running or pole vaulting? Women must also wear long stockings, which hinder free movement of the knee. No one ever heard of an international record being broken by any one wearing long stockings. There is also a lack of money for sports among the girls. While many thousands of dollars are spent to finance football, basket-ball, and swimming teams for games with other schools each year for the men, no money at all is expended to take women's athletic teams on similar trips, although we have the teams and would like to go.

From all over the world comes the cry for women's rights, and with such rights comes the obligation of women to be physically strong and clear-headed. Nothing will aid this more than improved and encouraged athletics for college women. Please give the girls a show in college athletics. All we need is encouragement, money, and a revision of public opinion regarding correct athletic clothes.

Ann Coe,
University of Minnesota, Class of 1925.

A later issue will contain other prize-winning letters from undergradutes on the subject of college athletics.

THE OLD PEARL NECKLACE

BY MARY VALENTINE STANLEY

"Joseph, the Princess A. has a pearl necklace to sell."

Joseph Wise was playing Schumann, and did not hear. He was an American Jew of fifty. He had a benevolent face, a bald head, and dreamy eyes. His young wife, Madeline, was also an American, but not of his faith. They had been married a year, and were spending a month of their prolonged honeymoon in Vienna.

"Joseph," repeated Madeline, "the Princess A. has a pearl necklace to sell. She has asked me to call this afternoon to see it."

"Where does she live?"

"In the L—— Palace, in the S—— Gasse."

"I should like to see that palace. I hear it is eight hundred years old."

"Good. You shall see the palace, Joseph, and incidentally I may pick up a jewel or two. Let us go now."

Joseph rose obediently and put on his coat. Madeline pulled a turquoise velvet hat over her brown curls and wrapped herself in a seal coat with a sable collar.

"I learned from Levi yesterday that this coat belonged to the Duchess L. As she was quite a dowd, it looks far better on me."

Joseph looked into the fresh young face and smiled.

"You are beautiful, my dear. I like to see you in this coat, but I hope the Duchess is not cold."

"The aristocrats were a soft lot, Joseph. It will not hurt them to know poverty. I suffered hardships, and worked early and late until I met you, dear old boy!" She bent her soft cheek to his. "Now it is my turn to enjoy the flesh-pots of Egypt."

Arm in arm they walked through the gardens of the Belvedere. For a moment they paused in front of the palace where the ill-fated Sophie and Ferdinand had lived and gone out to die. Through the glass doors they caught a glimpse of the great marble hall and stairways with their statues and priceless tapestries.

Hundreds of children, undersized, with faces prematurely old, many scantily clad, were passing through the iron gates and climbing the hill to the palace.

"These youngsters are fed here every day by the Americans, Madeline. See the Stars and Stripes waving over the doors of the royal kitchen."

"It is the American money that is keeping Austria alive," she replied, "and to-day there are seven hundred and twenty kronen to the good old American dollar. I have already cashed five hundred dollars," added Madeline, gleefully. "Let's run along, Joseph. It's four o'clock; we dine at eight and we play bridge with the Levis at half-past nine."

They walked rapidly through the gardens, and came out on the Rennweg.

A young girl with a sack of coal on her back trudged wearily by. Women harnessed to carts patiently dragged their heavy loads. A one-legged soldier crouched on the pavement. About his

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neck hung a card on which was written: "*Bitte, Ich bin ein blinder Mann.*"

"He fought for his country, poor lad, and now he has no country to mother him," said Joseph, sadly. "Look, Madeline."

"Yes, I see, Joseph, but you gave thousands of kronen for the soldiers' fund this morning. Let us forget them for a little while, and talk of something cheerful. Pearl necklaces, for instance. All my life I have longed for pearls. Many times I have gone window shopping on Fifth Avenue. One Saturday afternoon (I was working for fifteen dollars a week then) I went from shop to shop, trying on necklaces just for fun. You say yourself that my neck was made for pearls."

"Well, my child, buy your little baubles, if you care for them."

They walked in silence for a time, Madeline in joyous anticipation of seeing the jewels on her white throat, and Joseph quietly content in her happiness.

When they crossed the courtyard of the Hofburg, Joseph's eyes kindled.

He recalled to Madeline the memory of the time when, as a boy of fifteen, he had come to Vienna with his father, who had presented a petition from the Jews to Francis Joseph.

"It was in this palace, Madeline, that we were most graciously received by his Majesty; and the petition did much good to my people."

His wife smiled and nodded. He did not know that his words had fallen on deaf ears.

When they reached their destination, Joseph lingered to look at the lions that guarded the door of the palace.

"You could tell some interesting tales, you old fellows," he said: "you saw—"

"I'm glad they can't talk," interrupted Madeline, good-naturedly.

The porter, a withered, pallid old man, opened the door with a faint "Kiss thy hand." He led them through the great stone corridor, and up the steps to the apartment of the Princess. A butler, equally old and pallid, in a gorgeous livery with silver buttons, ushered them into the *salon*.

The Princess was short and fragile, but carried herself with dignity.

Her white hair was piled high on her small head. Her face, worn by sorrow, was still lovely in its delicate beauty.

Like all educated Viennese, she spoke English fluently.

She had never been to America, she said, but she had many American friends. She had frequently entertained Mark Twain and his sweet wife while they were living in Vienna. She had known Bret Harte, William Dean Howells, and many others.

Joseph was keenly interested in her reminiscences, but Madeline was restless. That the great of many lands—statesmen, authors, artists—had been entertained in that stately *salon* by the Princess was nothing to the young American. She had only a vision of herself wearing the pearls.

"Princess," she said, abruptly, "may I see the necklace?"

The Princess came back to the present with a start, but did not answer.

"It is quite cold here," she said, hastily. She touched the bell, and the butler entered with a tray of tea.

He put a shovel of coal in the big white-and-gold stove, and stole noiselessly out. The princess followed him with her eyes.

"Dietrich was five years old when I was born," she said. "We were born in this palace, both of us, and all these years he has served me faithfully. My younger servants I have had to dismiss, but my old servants I hope to keep with me to the end."

Her voice faltered, but in an instant she smiled, saying gayly, as she poured the tea:

"You must drink my famous tea. This was given me by the Emperor of Japan, and I have enough for a lifetime."

"Delicious," said Madeline. "I wish that I knew the Emperor."

The old Vienna china with its rosebuds, the squat tea service and long spoons worn thin by age, the Princess with her high-bred face and sensitive hands, made a never to-be-forgotten picture in the eyes of Joseph Wise.

Madeline cleared her throat for another effort. "Princess, it was very kind of you to give us a chance to see your pearls."

The Princess bowed her head and drew a jewel-case from her hand-bag.

Madeline's eyes glistened, she leaned forward eagerly.

The Princess held the case in her hands unopened.

"These pearls were given me by my great-great-grandmother, the Princess of A." She pointed to five miniatures that stood in a row on the old Viennese table. "See, for five generations we have been painted in these pearls."

Joseph rose and studied the miniatures.

"I have made quite a collection of miniatures," he said, "but these are exceptional."

"Though the pearls are very old," continued the Princess, "they have not been allowed to die hidden in jewel-boxes. They have been kept alive and beautiful by almost constant wearing. Ever since they came into our possession twice each year they have been dipped in sea water."

She opened the box, and, taking out the precious treasures, wound them four times around her slender neck. They were exquisite in color and perfectly matched.

"When Napoleon Bonaparte was in Vienna, Madame, my grandmother, was presented to him. She wore these pearls. Napoleon wished them for Josephine. At the coronation of Queen Victoria my—"

But she was not allowed to finish her proud story. Madeline could no longer control her impatience.

"Princess, how much are you asking for the necklace?"

"Hermann, the expert, priced them at two million kronen."

"Thank you. May I look at them closely?"

Reluctantly the Princess placed them in her hand. Madeline walked to the pier-glass and wound them around her lovely neck. Her eyes sparkled. For some moments she stood silent, smiling at her reflection in the mirror.

Joseph had picked up an illuminated copy of the Book of Job, and seemed to have forgotten everything but the exquisite beauty of the old pages.

The Princess sat quite still, her hands crossed in her lap.

Presently Madeline turned from the smiling face in the glass, and said, coldly:

"The price set for the pearls is absurd."

"Absurd!" cried the Princess. "The necklace is famous, not only for the perfection of the pearls, but because of its historic interest."

"Its history does not interest me, Princess. If they had been worn by all the queens in all the Courts of Europe, it would not enhance their value in my eyes."

The Princess shivered, her eyes filled with tears.

"You have other jewels?" asked Madeline.

"I had others, but nearly all of them were sacrificed during the second year of the war. I gave the money to my sister, the Duchess of L. My diamonds are in Paris, but the market is glutted. The windows are ablaze with jewels that once belonged to the aristocrats of Russia, who have literally poured their treasures into the lap of Paris."

"True," Madeline smiled slightly, "the markets everywhere are glutted. You can't expect to receive normal prices. I will give you one million five hundred thousand kronen for the pearls."

The Princess raised her eyes half proudly, half appealingly.

"I have gladly sold my jewels to help others; but the pearls are so precious, if I must part with them, do not ask me to do so at a sacrifice."

There was no response. The Princess glanced at Joseph. His face was bent low over the book.

The tall clock struck six.

"We must be going," said Madeline, briskly. "Shall I have my husband draw a check for one million five hundred thousand kronen? I assure you, Princess, you can do no better."

"One million five hundred thousand kronen is only about two thousand dollars in your American money," cried the Princess bitterly, "and my need is great."

For a moment they looked at each other, the *nouveau pauvre* and the *nouveau riche*. Madeline, still wearing the pearls, looked down on the little Princess from her superior height and waited.

A vision of what the morning would bring without money swept over the

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Princess—immediate need forced her to yield.

She bowed her head.

"You may have the pearls for one million five hundred thousand kronen," she whispered so low that Madeline was forced to bend her head to catch the words.

"Joseph, Joseph!"

"Yes, Madeline."

"Please draw a check for one million five hundred thousand kronen."

Slowly adjusting his glasses, Joseph drew his bank book from his pocket and wrote the check.

"Good-by, Princess." Madeline was all smiles and graciousness as she took the cold hand of the Princess in hers. "Let me know if you do not sell your diamonds in Paris. Ah, the jewel-case—I will take that too, please, but I will wear the necklace home."

She beamed on the butler, and put twenty kronen in his hand as she swept through the door into the hall.

Joseph bowed low as he slipped the check into the hand of the Princess.

"Don't discuss Job, please, Joseph. I know that is what you would like to do, but it is getting late," said the gay voice from the doorway.

"Coming, Madeline."

The Princess glanced at the check through her tears. Then she lifted her eyes to the man without a word, but he read in them her unspoken joy and gratitude. Joseph Wise, the Jew, had drawn his check for *two million kronen.*

When they reached the street, Madeline fairly bubbled over with joy.

"Joseph," she said, confidentially, "I shall tell all my friends that the necklace is valued at two million kronen, and—"

"Tell your friends," said Joseph, with a look the woman never forgot, "that your husband gladly paid the full value of the famous pearl necklace."

MISSISSIPPI'S GREAT FIGHT FOR HONOR AND PROSPERITY

BY FREDERICK W. JONES

ALL of the foreign fire insurance companies doing business in Mississippi have withdrawn.

At the time of their leaving there was only one home fire company, and that a small one. Ever since property has been without adequate protection. Many industries, such as cotton-oil mills, that have been destroyed by fire have not been rebuilt. The credit that is based upon sound fire insurance has been shaken, and a long trail of economic and social ills has followed. The Governor has made the charge that the fire insurance companies, in revenge for legal prosecution undertaken by the State Revenue Agent, Stokes V. Robertson, which led to their withdrawal, instigated a seduction suit against him that has created a scandal throughout Mississippi. An investigation of the Governor's charges has recently been made by a committee of the House of Representatives, which reports that it can find no evidence to support such charges. And while all this is going on the people of the State are rapidly dividing into two great camps in preparation for a social, economic, educational, political, and, eventually, religious battle that will probably continue for years. At any rate, this battle from now on will be carried into every important contest before the people until it is settled. These, in brief, are the events that led up to the present unhappy situation:

Over a year ago the Revenue Agent brought suit against the fire insurance companies, among them most of the largest and most influential in this country and abroad, for $400,000,000 of punitive damages. He charged them with violating the anti-trust laws through the use of the rates advised by the Mississippi Rating Company of Vicksburg, thus conspiring to fix rates and destroy competition. The maximum penalty established by law is

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$5,000 per day. As the alleged offenses covered a period of several (about fifteen) years, the total damages demanded were sufficient to wipe out the capital and assets of a great many of even these powerful companies in case the suit of the State were successful. Soon after the suit was filed the Revenue Agent garnisheed all the funds due or to become due the companies in Mississippi, amounting to about $1,000,000. At about that time the companies let it be known that they would have to stop writing business. The Revenue Agent maintained that such action simultaneously taken amounted to another conspiracy, and he succeeded in obtaining from the courts an injunction against such alleged conspiracy. The companies, however, were forced to refrain from writing business, and when, on March 1, the time for the renewal of their licenses for the next business year arrived, their right to operate in the State expired by default.

In the trial which followed, the Insurance Commissioner, T. M. Henry, who has held his office for many years and enjoys a high reputation for ability and integrity among insurance commissioners throughout the country, showed that he regarded the action of the Revenue Agent as an outrageous attack upon the companies and a terrible blow to the good name and the prosperity of the State. He testified that fire insurance could not safely be written without the use of such a service as was provided by the Mississippi Rating Company, a corporation chartered by the State to perform the very service for the use of which the companies were sued for four hundred million dollars. The business, he said, could not survive without expert inspection and classification. No one company could maintain such an expensive service and sell insurance at a rate within the reach of property-owners. Through a service that was used by all the companies the expense could be so distributed that no policy-holder would feel it. Moreover, the Commissioner stated, uniform rates were universal, in line with sound public policy, and were essential to safeguard solvency of the insurers.

In the trial the attorney for the companies established the fact that his clients were afraid of the attitude of the State toward foreign capital and refused to subscribe to or make use of the Rating Company without an opinion from the Attorney-General. It was only upon

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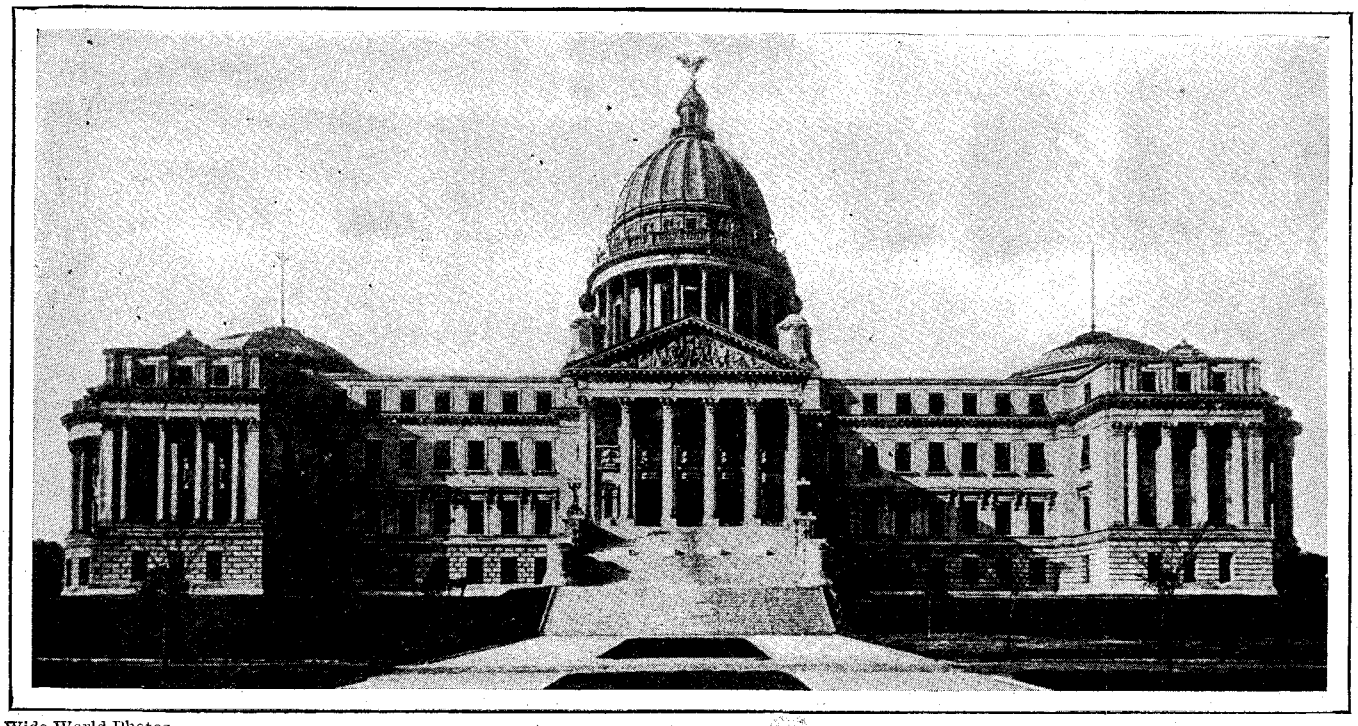

Wide World Photos

THE STATE CAPITOL AT JACKSON, MISSISSIPPI

This imposing building was constructed from funds accruing from railway damages

his assurance that such use would be legal that they made use of this service. It was also asserted both by the attorneys for the defense and the Insurance Commissioner that the companies have made little or no profit in the State since they entered it.

A powerful effort on the part of business men and the insurance agents, supported by a large part of the press in the cities, was made to persuade the Governor to call a special session of the Legislature to abate the suit. The Governor responded in a public statement bitterly attacking the companies. The suit in the lower court resulted in a judgment calling for damages of over a million dollars.

Since then a public prosecuting official in one of the counties has brought suit against all the foreign life insurance companies for enormous damages. The charges were almost exactly similar even in phraseology to the Revenue Agent's suit against the fire companies—conspiracy to fix rates and destroy competition by the use of the American Experience Table of Mortality.

The Legislature was in session when this suit was filed, and a law was passed, but not without serious opposition on the part of the administration, abating the suit. A bill was also passed by the House and Senate making legal such service as the Mississippi Rating Company, but the Governor refused to sign it on the ground that it would be equivalent to sanctioning the acts of the "outlawed" companies, as he calls them.

The chief contest in the Legislature which recently adjourned developed over the question of putting the Revenue Agent upon a salary. He now receives a commission of twenty per cent of all the damages he can collect. His office has brought riches to its occupants. Wirt Adams, who died in the office, left a very large estate. Under his administration the present imposing State Capitol at Jackson was built with the funds accruing from railway damages. In this connection, it might be added that the State recently has been suing several railways for enormous damages. As has happened in so many cases of this kind, the suit resulted in a compromise involving a judgment for a small fraction of the amount the State originally demanded.

The forces that are eager to encourage foreign capital to remain in the State and new capital to enter maintain that if the Revenue Agent were on a salary basis the world would hear no more of the withdrawal of corporations. The forces supporting the Revenue Agent maintain that these corporations are "trusts" and "tax dodgers" and that the vast sums that are being collected from them are helping the poor farmers who are now carrying a heavier burden of taxation than they can long endure. This bitterly contested piece of legislation was vetoed by Governor Russell. In giving his reason for the action he made a prediction that far-seeing men and women of Mississippi thoroughly believe will come true. He said that the issue raised by the suit against fire insurance companies will be the issue upon which all great questions will be tried from now on until it is settled.

The Governor, the Revenue Agent, ex-Senator Vardaman, and their friends maintain that "the trusts" are threatening the sovereignty of the State, attempting to dictate to the Legislature and the courts. Their opponents assert that the men who are fighting outside capital are actuated by selfish motives. The commissions are unduly attractive, and as such dangerous in perversion possibilities, they declare, and the demagogic resort of stirring up among the poor and ignorant a hatred of organized wealth is injuring the good name of the State, crippling her finances, and putting evil men in her high offices. Mississippi is one of two States that are losing in population. There has been a vast exodus of Negro labor; the capital necessary for its employment has been withheld. This is the line of cleavage.

A brief analysis of the coming battle-ground cannot but be interesting to the student of American economic and political life. Mississippi was once led by some of the greatest statesmen of the Nation. Such names as Davis, Lamar, Prentiss, and George are proof of that statement. Nor has her glory quite yet departed. John Sharp Williams is in the front rank of scholarly statesmen, and Senator Harrison has gifts of political analysis and attack. But this is all that for the moment remains of her greatness, and that is established at Washington.

Since Vardaman came into power upon the back of the Negro the demagogue has been all-powerful in State politics. In his day it was the promise of the repeal of the Fourteenth Amendment that won the support of the trustful small farmer. To-day it is the cry that "the trusts shall not pass," as Governor Russell puts it, that is holding him in line. But there are signs of such an intense campaign of education in the rural districts that this all-powerful voter may soon waver in his allegiance.

The "hill" farmers for years have carried every election by a huge majority. They read but little, chiefly the county weeklies, which are supported by the county advertising supplied by the supervisors, who, for the most part, are

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loyal to the Vardaman-Russell-Robertson combination of corporation hunters. These newspapers contain the most extreme attacks upon the "outlaw" fire insurance companies and the most extravagant praise of the Revenue Agent. The larger dailies of the cities within the State and from the big cities outside the State, which are boldly or quietly opposed to the attitude of the State toward corporations, circulate but little among the outlying farms of the hills.

But powerful forces are rapidly organizing to reach this region. Neglect of it by the leaders of enlightenment and righteousness has allowed ignorance and intolerance to govern the State for many years in the person of the demagogue. The wide insistence upon better education of the masses has resulted in the last few years in the establishment of many consolidated high schools and agricultural schools that have already stopped the progress of the demagogue. In the last Legislature each day saw an increasing weakness on the part of the formerly all-powerful faction that represented the narrow-mindedness and class hatred of the misguided and demagogue-ridden small farmer. Even "Vardaman's Weekly," which has a wide circulation among the hills and reads like the address of some radical agitator in London's Hyde Park, is not everywhere regarded as sound economic and political gospel.

Some of the most patriotic and forward-looking Mississippians are setting aside many of their regular duties to devote their attention to offsetting the evils that have sprung from these years of demagoguery. Ex-Governor Charles H. Brough, of Arkansas, a native of Mississippi and a graduate of Mississippi College, has been going up and down the State pleading with the people to change their laws and their attitude toward capital. Mr. Barney E. Eaton of Gulfport, George R. James of Memphis, and J. T. Thomas of Grenada are also trying to guide the citizens from the public stump, pointing the way to sound farming and business principles. But the man who is doing the most for the future of Mississippi to-day is, in my opinion, C. H. Markham, the remarkable President of the Illinois Central Railroad, which operates extensively in this State. His company maintains "Demonstration Farms" throughout the State. His agricultural experts lecture and display moving picture reels in the schoolhouses along the I. C. and the Y. & M. V. Railroads. "Diversify; live at home; use well-bred stock; produce and drink milk; improve your poultry." That's his message. In public speeches, in paid advertisements, and in multitudes of personal letters he has reached almost every district and corner of Mississippi. His frankness and his fearlessness have won thousands of small farmers to a belief in him and his road as agents of public service. More men of this type, and Mississippi would meet the Vardaman issue, soon to absorb the attention of the State, with perfect confidence—the former Senator's return to Washington would be forever barred. In a recent letter to the writer President Markham said:

"The ease with which demagogues sometimes succeed in misleading the people is enough to shake one's belief in the virtue of democracy, but my faith in democracy has come through all such tests thus far unshaken; I believe in the ultimate triumph of justice wrought by public opinion, when the public has all the facts and is given opportunity to pass sane judgment upon any issue. But we cannot desert the field and turn it over to the enemies of progress. The cause of righteousness demands fighters."

To many of us lovers of this misguided State of sweet and glorious memories who are fighting this battle from the stump, the press, and the pulpit, it is inspiring to think that such men as President Markham are enlisted in the cause, and we await with confidence the issue of the conflict.

CLEAN MILK FOR THE METROPOLIS

BY SHERMAN ROGERS

INDUSTRIAL CORRESPONDENT OF THE OUTLOOK

ICY blasts swept Manhattan from the Battery to the Bronx. Surface-car traffic was entirely suspended. Broadway was practically devoid of vehicular traffic. Great drifts of snow covered every thoroughfare in the city. A great majority of streets were absolutely impassable.

We prepared our breakfast in our upper Manhattan apartment. A terrific wind rattled every window in the apartment like something "possessed." The thermometer registered below zero. The lady across the hall, her fingers blue with cold, assured us it was the worst ever in the seventeen years she had lived in New York City. Newspapers were not delivered that morning—but, to our intense surprise, *milk bottles were*. We were at the end of a milk route; our milk generally reached us about seven o'clock. On this morning before nine we heard the milk bottles rattle, less than two hours late, and our driver assured us that he had served every customer, leaving the barn at half-past two, in the worst storm he had ever experienced.

I tried to picture a man huddled up in a milk-wagon breaking through snowdrifts from two to four feet deep, actuated by only one impulse, and that to serve the women and children on his route with their milk supply. Since that time I have marveled that a city the size of New York, with its teeming millions, should enjoy uninterrupted milk distribution all seasons of the year. And as I write this I cannot help a lump from rising in my throat to think that some of the milk-wagon drivers of New York City should have sullied a record that any man or body of men in the world could feel wonderfully proud of by voluntarily stopping the distribution of milk throughout the city. Unfortunate? Yes. Because a few heated, blind moments, temporarily at least, turned the sympathy of milk consumers against men who were admittedly a corner-stone in service to every family in the great metropolis. I want it to be only temporary, and I hope that the American public will close the record of those few weeks when the men were on strike. Forget about them, or, at least, weigh them in the balance with the valorous work performed uncomplainingly by milk-wagon drivers outside of those few weeks above mentioned.

They are deserving of as much credit as any other class of citizenry in New York City in maintaining a service that the health of the city depends upon to such a large degree.

Yes. Picture these milk-wagon drivers in rain and sleet, snow and ice, bad wind or fair weather, leaving the milk depots at three o'clock every morning. No matter what the obstacle may be, milk is on hand—possibly a few minutes late, or, under practically impossible conditions, an hour or two—but it always arrives. Certainly these protectors of public health are deserving of as much credit as any other element of American society.

The morning of the great blizzard set me to thinking. What kind of an organization was behind the milk-wagon driver? Milk did not pour out of the clouds; there must be prodigious efforts continually performed by men and organizations that handled the milk before it was delivered to the wagons at 3 A.M. On this morning train traffic was practically tied up in local sections all over the State of New York, yet we received our milk; not milk to be afraid of, but the purest, finest milk possible to be obtained. According to the unqualified statement of Dr. Royal S. Copeland, Health Commissioner of New York City,

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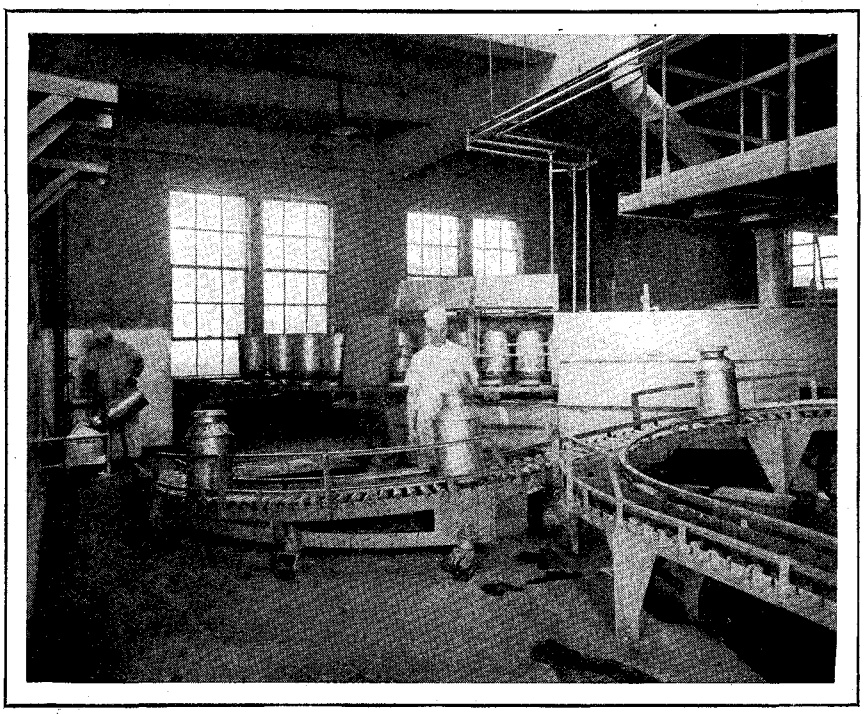

Courtesy Sheffield Farms Co.

RAW MILK FROM THE COUNTRY—INSPECTION BEFORE PASTEURIZATION. SHIPPING-CAN WASHER AND DRIER IN BACKGROUND

"the most sanitary and efficiently handled milk service in the world is rendered by New York milk distributers, whose performance is unsurpassed and unsurpassable. The pasteurized milk distributed in New York is absolutely free from pathogenic germ life, and, as a result, infant mortality in New York City has been reduced from two hundred and forty in 1891 to seventy-one last year per thousand—a decrease of more than seventy per cent." Other cities may come up to New York in many standards of public service, especially the urban centers of the Far West, but when it comes to milk New York stands in the forefront of any other metropolitan city.

The New York mother can feed her infant, no matter how young, with the pasteurized milk delivered to her door every morning without the slightest fear that there may be pathogenic germ contamination; surely a great load to be lifted from the shoulders of the average anxious mother.

Pasteurization did not happen overnight. Behind the scenes of the experimentation and introduction of commercial pasteurization of milk lies one of scientific, sanitary development, every bit as interesting and startling as the most interesting stories of modern sanitary campaign waged by General Goethals in the Panama Canal Zone. The story of American milk pasteurization is one of indefatigable endeavor and unstinting sacrifice of public-spirited men. Pasteurization was first introduced in this country in an experimental way by Nathan Straus. There is a story behind Mr. Straus's deep interest in sanitary milk distribution that demonstrates that ofttimes a seemingly insignificant incident results in revolutionizing entire industries.

Mr. Straus owned a farm. He had a herd of prize milch cows. One of his pet cows died, and an autopsy conclusively proved that the death of the animal had been caused by tubercular infection. Investigation proved to Mr. Straus that the infection of his pet bovine had been caused by a man with tuberculosis handling the hay fed to the cow. If the eating of a tubercular infected handful of hay could cause the death of the animal, what, Mr. Straus immediately asked himself, would happen to the unsuspecting public that consumed the milk given by such a cow? He immediately began to investigate the Pasteur method of elimination of pathogenic bacteria by a modern scientific invention called pasteurization. In 1892 Mr. Straus established a milk pasteurizing laboratory and distributed milk from five depots, which operated throughout the first year and steadily increased until commercial pasteurization of milk became a fact in New York City. Mr. Straus was bitterly attacked, but kept up his courageous battle, and the New York public in particular, the American public in general, owe Mr. Straus a debt of gratitude that they will never be able to repay.

In 1902 Mr. Loton Horton, President of the Sheffield Farms Company, Inc., became deeply interested in the pasteurization of milk on a commercial basis. Investigation proved that in Berlin, Germany, where the pasteurization of milk was compulsory, infant mortality had decreased over sixty-six per cent. Mr. Horton went to Europe; he became thoroughly satisfied that pasteurization on a commercial basis was not only possible but absolutely necessary for the protection of public health. He began a remarkable series of thorough tests, employing the most noted bacteriologists in America. Mr. Horton, without regard to expense, experimented until he had brought commercial pasteurization to a stage where the elimination of all pathogenic germ life was a positive fact. He was not satisfied with the twenty-five-minute retention of milk at a temperature of 146°, and so, as a final test for absolute certainty, turned over a pasteurizing plant at 130th Street and Broadway, New York City, for experiments, and there, with the assistance of Dr. Park, Director of the Research Laboratory of the Department of Health, New York City, and Dr. Rosenau, of Harvard University, various comparisons of milk, held at different temperatures for various periods of time, were made.

I asked Mr. Horton about these tests; I drew his attention to the fact that, even though laboratory tests might not disclose the presence of germs, it might still be possible for them to exist in some cases. "Quite so," he admitted; and then enthusiastically added, "We proved the total absence of living pathogenic germs by using hundreds of pigs in our experiments."

"Pigs?" I queried, astonished. "Great heavens, you don't class the frailties of a human with the ruggedness of pigs? Pigs kill rattlesnakes by shaking them to death; they are bitten, but do not become poisoned. There certainly has never been a human being that could take a rattlesnake in its teeth and shake it to death, and be immune to its bite while doing it."

"Oh," he replied, "I don't mean Poland Chinas; I mean guinea-pigs."

This was some relief to me. Mr. Horton continued: "You see, guinea-pigs very easily become infected by pathogenic germs. They are extremely sensitive. We took no chances. We finally found, after exhaustive tests, that by inoculating the pigs with milk subjected to a Fahrenheit temperature of 145° for thirty minutes not a single trace of disease-breeding bacteria remained. We therefore leave our milk exposed to 146° Fahrenheit for fifty minutes, which eliminates any possibility of a living pathogenic germ."

Personally, I have always been convinced of the efficacy of pasteurization; yet I have heard so much about "milk from contented cows" that I put one more query: "Would it not be possible to install the latest methods of sanitation in country dairies, whereby the care of milk-producing cows would eliminate the chance of their being infected, and thereby save to the public the added cost pasteurization causes?"

"Well," replied Mr. Horton, "that is being done, and in some places with a great deal of success. However, we find the finest herds in the world existing under the latest sanitary conditions, and still the owners of these modern farms are continually forced to destroy their cattle because of the discovery of tubercular infection."

This statement is verified by the ex-

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perience of the late J. Pierpont Morgan, who had a herd composed entirely of pedigreed animals. Mr. Nathan Straus, in his book on "Diseases in Milk," points out that several years ago a third of this valuable herd was killed on orders cabled by Mr. Morgan after it had been discovered that they were infected with tuberculosis. Mr. Straus had written shortly before this pointing out to Mr. Morgan that his physician had made a report on the Morgan dairy farm and found it to be the best example in the country of a scrupulously clean, sanitary farm, but directed his attention to the fact that he did not pasteurize his milk. I should imagine that it was some shock to Mr. Morgan, six months later, to learn that one-third of this model herd had tubercular infection. This certainly proves that under the most favorable circumstances milk from even the most carefully selected cows is not entirely free at all times from the presence of living pathogenic bacteria.

Mr. Horton so impressed me with the necessity of proper pasteurization that I requested permision to go through his seven large pasteurizing plants in Greater New York.

I received the surprise of my life when I entered one of the pasteurizing plants and learned that milk receives more careful attention in a pasteurizing plant than a patient receives in the most modern hospital. I found a "factory" where, from the time that the milk began its journey through the plant, it never touched human hands. Even better, the milk does not touch human hands at any time, from the farm to the consumer.

When the Sheffield Farms Company, of New York, first built their great pasteurizing plants, they were severely condemned in many quarters for spending so much money on sanitary plants, which cost must necessarily be added to the price of milk. Just as well argue that New York City should save the greater portion of the $170,000,000 now spent each year on supplying its residents with pure water, when they could just as easily pump their supply from the upper Hudson River and save this great expense to the public.

As I started my journey following a can of milk through the plant, the superintendent outlined to me the trip the milk had already taken from the farm to the city. Dairymen, under State supervision, had delivered their milk to the creameries, and the milk, before it was placed in the refrigerator cars, had been thoroughly inspected by State authorities. It was then brought to the city in cars properly iced, held at an even temperature, rushed from the city's freight station direct to the great pasteurizing plant, where it was immediately taken on a conveyer to the top floor of the plant, and started on its journey to the bottle on the ground floor. At the top of the station, just before the milk is dumped from the cans into a thoroughly sterilized hopper, I noticed a big man lift a can top off and smell it. This aroused my curiosity. "What's he doing?" I asked the superintendent.

"Ask him. He's one of the most expert men on the job."

Just as I reached the "expert" he yanked a ten-gallon milk-can out of the conveyor. "What's the matter with it?" I asked.

"Tainted," he snapped.

Personally I can detect sour milk a mile off, but I was unable to notice the slightest taint in this can of milk; but this expert "smeller" apparently was a better "expert" than the State authorities who had inspected it some hours earlier.

"Do you find many?" I queried.

"I find them now and then. That's what I'm paid for. That milk could pass through and nobody would ever know the difference." But the "factor of safety" consideration "gets the tainted can."

The milk passes through the hopper into a centrifugal clarifier, which removes every particle of foreign matter that may be in the milk. Mechanically clean, it then flows into a tank, from which it passes to the heater of the pasteurizing equipment. Here the milk is carefully regulated to feed eleven thousand pounds an hour into its respective pasteurizer.

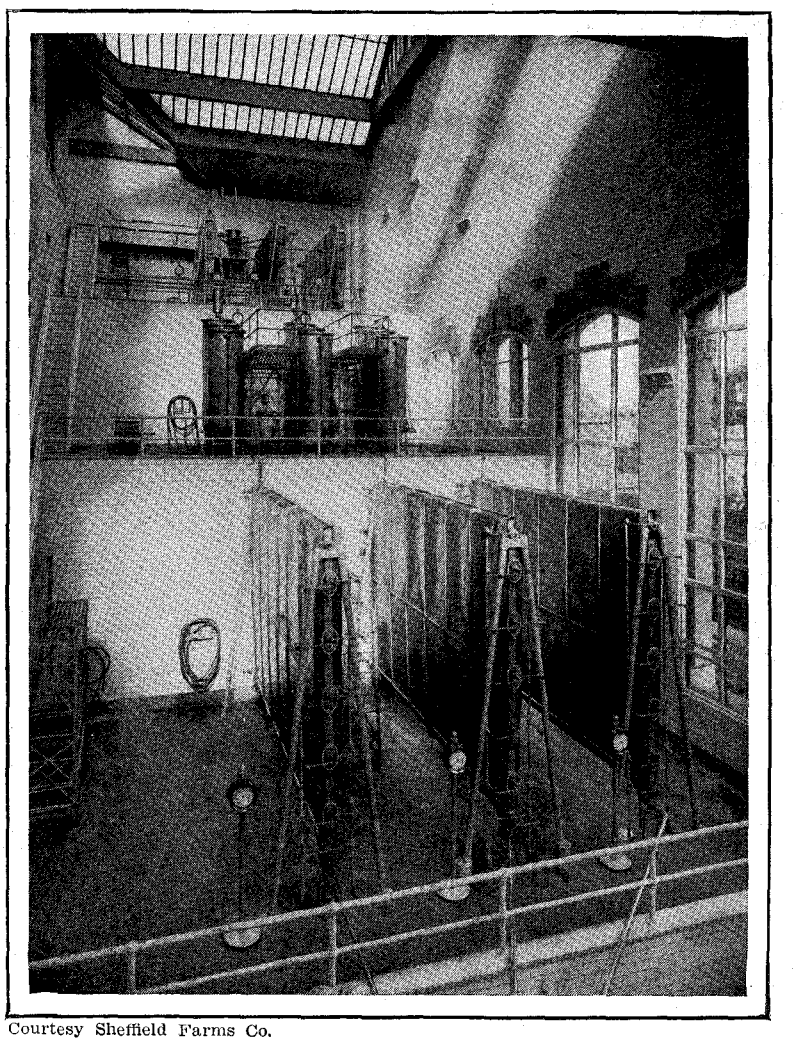
"Why this control?" I asked.

"Well," he said, "we've got to make it fool-proof. Men may get in a hurry. Under this system they can't. The job is done right whether they want to do it or not."

The milk then flows down over the outside of a series of sterilized tubes, its temperature being raised to between 145° and 146° Fahrenheit. The time of raising to this temperature is approximately one minute, and again the controlling machinery comes into use. The milk flows from the heater through a system of holding tanks, automatically requiring at least fifty minutes to pass through, the temperature never varying over one-half degree in that entire time.

I noted that the machinery was regulated so that under no circumstances could the milk pass through these tanks without being held at least fifty minutes. I asked, "Why all the great care?"

"Sometimes a workman may want to go to church or keep a date with his 'best.' He cannot shirk his duty under



Courtesy Sheffield Farms Co.

PASTEURIZING ROOM—CAPACITY SIXTEEN THOUSAND QUARTS PER HOUR

Top landing, milk heaters—cold raw milk raised to 146° F. Next landing, holding cylinders—hot milk retarded fifty minutes. Next landing, coolers. Next landing below and on street level, bottle fillers and cappers. A bottle filler is shown on the succeeding page

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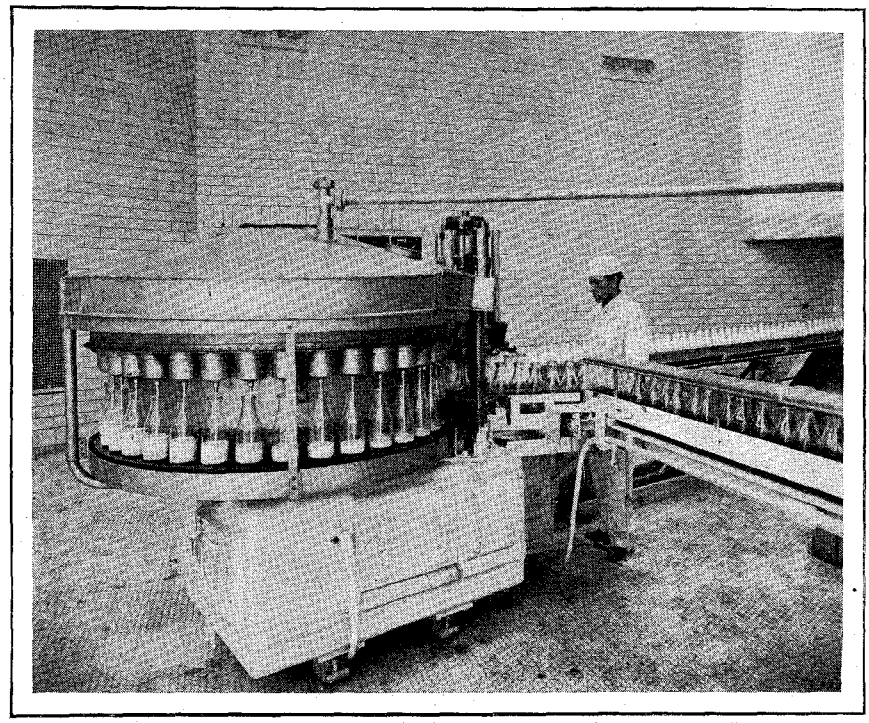

Courtesy Sheffield Farms Co.

A ROTARY FILLER AND AUTOMATIC CAPPER—CAPACITY EIGHTY-FOUR BOTTLES PER MINUTE

A measured amount drops in each bottle. The milk flows to this machine from the cooler shown on the preceding page

this regulated control system. We hold the milk fifty minutes instead of thirty, as is supposed to be sufficient, allowing this difference as another 'factor of safety.'"

From the holding tanks the milk flows down over a cooler, which reduces its temperature to 40°. Here a system of gauges and automatic controls eliminates the danger of any possible error on the exact degree of temperature, there being three gauges on each tank, or holder, which again guarantees absolute protection from possible human error. From the cooler the milk passes into a tank with an electrically driven agitator, which supplies the mechanical bottle and can filler.

The pasteurized milk is then bottled by a newly invented machine which fills the bottles and caps them at the same time with wonderful rapidity, eliminating the necessity of a human hand coming in contact with either bottle or paper cap in the complete operation.

Not only does a human hand never touch the milk at any time, from the pasteurizer to the bottle, but even the air in the milk-room is thoroughly purified. Every particle of air is filtered before going into the room, and an automatic exhaust lets the air pass out; but it is absolutely impossible for a single particle of air to get back into the room without going through the filter.

I remarked about this. "Well," replied the superintendent, "it would certainly be foolish to spend millions of dollars in machinery and equipment to guarantee safety from germ life, and allow the milk to come in contact with germ-laden air. You see," he added, "germs are as fine and about as light as dust, and naturally are carried through the air. Well, they don't come in contact with our milk. And then," he confided, "the 'Old Man' is a crank on bugs. He fights bugs like Foch fought Germans. He's around here about half the time himself, and he'd blow up the factory if he found any place where a bug could get in. Of course I mean germ bugs, and," he added, "as a matter of fact, any other 'bug.'"

Pasteurizing from the holding tank to the bottle takes place in an enormous room completely tiled, with the overhead a solid expanse of glass. It is light enough in any part of that room, or any corner, to detect the tiniest flake of dust. I believe that was the most spotlessly clean room from ceiling to cellar that I have ever been in in my life. I have been a chronic objector for many years to the price of milk, but since going through these plants and seeing the immense amount of handling and money spent for protection of New York children, millions spent in modern sanitary equipment, I can begin to realize why there must be a difference between the price to the producer and the price to the consumer.

As we left this pasteurizing room I heard a great racket. It sounded like a boiler-shop on a busy day. It was the clinking of bottles—thousands of bottles. "Yes," smiled the superintendent, "here is one of our biggest problems, and one of the most costly that enter into milk distribution."

Bottles came in in crates on conveyors, literally by thousands, were plunged into a steaming vat, thoroughly cleaned and sterilized by forced pressure, and washed in a strong alkali solution. They then went through a vat where they were rinsed in clean, hot water at a temperature of 160°. As they came out the bottles were inspected; they then went through a sterilizer, where they were subjected to boiling water of 212°, and from the time they leave this sterilizer until they are filled and capped no man's hand touches them. After being sterilized they pass over electric lights, where they are further inspected. When filled and capped by the automatic machinery, they again travel on conveyors to the inspection room, where they are again inspected under electric lights and pass several experts, who now and then take a bottle out of the conveyor when they find a speck that has still got by, although this speck of dust has been sterilized. The inspector grabs it with as much enthusiasm as if it contained deadly bacteria.

I can bear witness to the fact that the bottles are washed in real hot water. I touched the bottom of one of them as it left the sterilizer, but I did not touch it for long. With a howl of pain, I asked the inspector why it was necessary to have the bottles so hot.

"To kill the bugs," he answered.

"But," I remonstrated, "it doesn't take 212° to kill a bug, does it?"

"No, it doesn't," he answered, dryly; "but, you see, the 'Old Man' always makes us observe the 'factor of safety.'"

A very interesting part of the milk distribution is the loading of the wagons. A driver drives up to the loading station platform, and in less time than it takes to tell it he has the necessary number of bottles and is on his way, making room for the next one. It is hardly necessary for him to stop his horse, the operation is so rapidly performed.

In connection with the cost of milk distribution, the delivery of a quart of milk by a driver who travels many miles and climbs from a hundred and fifty to a hundred and seventy-five flights of stairs, which are generally dark when he makes his rounds, naturally incurs a great expense even under the best-organized system of delivery. I have made many inquiries at department stores, and find the average cost of delivering a package to a customer, from a needle to a suit of clothes, is between twenty and twenty-four cents. The cost of delivering milk does not exceed twenty per cent of this figure. It is interesting and illuminating to know that the milk-distributing firms make the same profit selling milk in bulk at nine cents a quart at their stations throughout the city that they make from exactly the same grade of milk delivered to the consumer's door at fifteen cents a quart. There is food for thought in this fact, although there is a possibility of germ contact in containers used to hold loose milk, and Dr. Copeland strongly advises the use of bottled milk from a standpoint of absolute safety, even though more costly.

Bottles! The story of bottles is a startling one. Bottle breakage costs the Sheffield Company alone over six hundred thousand dollars a year. If the

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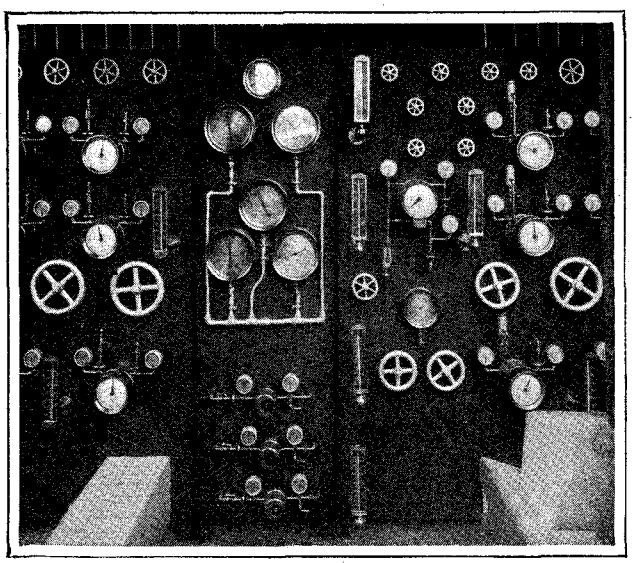
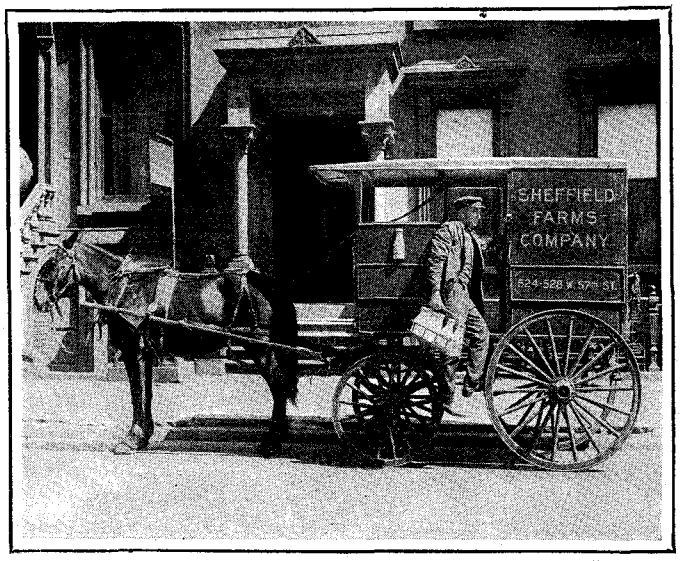


Courtesy Sheffield Farms Co.

STEAM PRESSURE REGULATORS AND GAUGES

This picture shows one of three sections of similar gauges in the Brooklyn plant of the Sheffield Farms Company. These instruments are the controls which automatically govern the duration and the temperature of the process of pasteurization



Keystone

DELIVERING MILK IN THE CITY

The milk industry, with all its improvements, as evidenced by the elaborate system for controlling the pasteurization of milk, shown at the left, is still conservative in its city delivery system, as indicated in this picture

average housewife realized that the milk bottle she is often so careless with costs from five to six cents, she would probably handle it with the care it deserves. I have been literally amazed at the terrific cost of broken bottles to the milk consumers of New York City. I suppose that holds good for every city in the United States. If a cat sets up a howl in the back yard, a milk bottle is the first object sent after it. I have seen many times in my three years of apartment life in New York City bottles carelessly thrown on dumbwaiters, resulting of course in many of them being broken. I have seen superintendents of apartment-houses throw the bottles on floors and break them, as if they were newspapers instead of precious five-cent pieces.

Walking down Ninety-fourth Street, near Central Park West, I heard the familiar rattle of broken bottles as an ash collector threw a can of refuse into his wagon. I gazed at the ash-cart. There were at least twenty-five milk bottles visible, and at least half of them broken. "What are you doing with those bottles in those ash-cans?" I asked, amazed at this wanton destruction.

"I've got no time to monkey picking the bottles out of these cans. If the people in these houses haven't any more sense than to throw these good milk bottles into ash-cans, I should worry. I find hundreds and hundreds of these bottles every day; half of them are broken in the handling of the can; many are broken when the ash-cart is dumped, and I don't care what happens to the unbroken ones after that."

Here are thousands of people kicking about the cost of milk, and yet these very same people are adding tremendously to the cost of the milk by throwing their empty milk bottles away like potato peelings; and every time a housewife breaks a bottle she adds a nickel onto her milk bill; indirectly, quite true, on the weekly bill, but certainly directly on her monthly bill. A little bit more care in the handling of bottles by the New York milk consumers would save them around a million dollars a year, considering the total milk distributed in the city by all companies. One milk authority assured me that two million would be a closer estimate.

Europe paid American progressive ingenuity a fine compliment recently. The greatest milk distributing firm in England, the United Dairies, Ltd., desiring to adopt the best scientific and sanitary methods in diminishing infant mortality in London, sent a commission, including some of their own directors, to investigate the leading pasteurizing systems of America, as well as Canada, and, on returning to London, they wrote Mr. Loton Horton as follows:

> We were profoundly impressed with the methods in operation in the best dairies in all parts of your great continent, but, with a very thorough knowledge and appreciation of these, we have no hesitation in ascribing to your methods and work the foremost position in the world, and we should indeed be happy if, with your kind guidance, we were able to introduce and popularize these methods in England.
>
> It is because we are convinced that your system best meets the demands of hygiene, promotes child welfare, and avoids culpable waste of milk that we are constrained to ask you to add to your present heavy burden of responsibility by assisting us out of your great experience in the task which lies before us of improving methods in this country.

This is indeed a sterling tribute to American leadership in protecting the public against unwholesome milk.

There is a human interest story behind the awakening of the great English dairy firm in American methods of milk pasteurization. Mr. Nathan Straus had bombarded the English public for years regarding the almost criminal negligence displayed by English authorities in protecting the London public from disease-laden milk. A peculiar circumstance aided in bringing about a successful termination of his efforts.

Dr. Royal S. Copeland's son became very ill while visiting in London through the drinking of contaminated milk. Dr. Copeland became very wrathy. He addressed a small body of men in London shortly afterward, at which time he vehemently declared: "I don't care if you folks drink this kind of milk yourselves, but I should think you would have *some* decent milk to give visitors." To which they replied, recognizing the truth of the statement, "Would you tell that to Lord Astor?"

"I would tell it to the King himself," answered the Doctor. Immediately a conference was arranged with Lord Astor, who, together with Lady Astor, became so much interested in the subject that a commission was delegated to visit America for investigation of the latest methods of milk pasteurization and distribution.

This commission, after an exhaustive study which carried them all over the United States, wrote Mr. Horton as before quoted, and, as a result, Mr. G. E. Huling, chief engineer of the Sheffield Farms, was requested to serve and is now serving as consulting engineer to this English commission.

With the aid of the municipal health authority, Dr. Copeland; the father of milk pasteurization, Mr. Nathan Straus; and the pioneer wholesale distributer of thoroughly pasteurized milk, Mr. Loton Horton, the English metropolis may soon enjoy the same pure, germ-proof milk that the American metropolis has enjoyed for some time.

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THE BOOK TABLE

AMERICAN PORTRAITS[1]

BY LYMAN ABBOTT

THESE are portraits, not biographies. He who wants to know what these men *did* must go elsewhere for his information. He who wants to know what these men *were* will find in this book a perfectly frank and very luminous interpretation of their characters. The great portrait painters are never content with an accurate presentation of the features of the sitter. They study him while they talk with him, and aim to reproduce, not merely the house in which he dwells, but the man himself.

This was Mr. Bradford's aim in this interesting volume. He seeks to interpret the inner life of the sitter, and finds it difficult to do so. "Souls tremble and shift and fade under the touch. They elude and evade and mock you, fool you with false lights and perplex you with impenetrable shadows, till you are almost ready to give up in despair any effort to interpret them." To be a true portrait painter, whether with pen or brush, requires much more than skillful technique; it requires insight and courage—insight to perceive the real men behind the mask which consciously or unconsciously we all wear, and courage to report without fear or favor what one has seen.

To illustrate Mr. Bradford's insight, take this sentence interpreting the temperamental conservatism of Cleveland: "'The Bible is good enough for me,' he said; 'just the old book under which I was brought up. I do not want notes, or criticism, or explanations about authorship or origin, or even cross-references. I do not need them nor understand them and they confuse me.'" It was that temperament that made him not merely a Democrat, but an "old-fashioned Democrat." He was almost impervious to new ideas.

To illustrate Mr. Bradford's courage, read his interpretation of Mark Twain: "His thought was bitter because it was shallow; it did not go deep enough to get the humble tolerance, the vast self-distrust that should go with a dissolving vision of the foundations of the individual universe. His writing alternates from the violence of unmeaning laughter to the harshness of satire that has no laughter in it."

One does not need to agree with all of Mr. Bradford's interpretations to welcome his volume as a luminous and courageous interpretation of eight of America's great, though not greatest, men.

[1] American Portraits (1875–1900). By Gamaliel Bradford. Illustrated. Houghton Mifflin Company, Boston. $3.50.

THE NEW BOOKS

FICTION

HERITAGE OF THE HILLS (THE). By Arthur Preston Hankins. Dodd, Mead & Co., New York. $1.75.

Out of every half-dozen stories of mining mysteries and other Western "movie stuff" about one or two have something more than thrill and jump. This is one of the small minority. It is an original tale in its incidents, and it is also told with ability and graphic power.

MOON ROCK (THE). By Arthur J. Rees. Dodd, Mead & Co., New York. $2.

Mr. Rees is a prolific and successful writer of mystery and crime stories. He has here built up his edifice of mystery with solicitous care, and puzzles his reader with his customary art. No one, however, need feel chagrined at not guessing the mystery; for this is one of a class of crime stories in which it is morally impossible to solve the problem, for the simple reason that a series of important facts which explain the cause of the crime are not known by the reader until after he has wasted a good deal of gray matter trying to guess what is unguessable.

UNCLE BIJAH'S GHOST. By Jennette Lee. Charles Scribner's Sons, New York. $1.50.

Did Uncle Bijah really have a ghost, or an astral influence, or just a moral influence? The author does not seem to be quite certain herself, and the reader is entitled to his own opinion. Mrs. Lee writes here, as in her other stories, with sharp presentation of individual traits and character and with brisk talk and action.

HISTORY AND POLITICAL ECONOMY

CANADA AT THE CROSS-ROADS. By Agnes C. Laut. The Macmillan Company, New York. $2.50.

In this volume various reasons are given for the fact that Canada does not receive full profits from her national resources. Whatever Canada's present economic outlook, however, she has enacted some exemplary legislation of an economic nature—for example, the Industrial Disputes, the Soldiers' Settlement, and the Selective Immigration Acts. Of the last named, we read:

> When the immigrant reaches the port of entry, he is not dumped in the nearest city. He is met by a government agent and guided to his destination. Is he a factory operative? To the factory and waiting job he goes. Is he a farmer—and it is the farmer for whom Canada particularly bids—he is put on the train and sent to the farm areas for which he has expressed a preference. At the farm destination he is again met by a government agent and again—if he so wishes—guided to his location. It is where colonists have resented this guidance and persisted in choosing poor locations that they have come to grief. The same paternalism, or maternalism, if you like so to call it, is exercised regarding incoming women colonists. Single women are selected on the other side of the Atlantic. They are brought out under care of a woman immigration officer and placed in the positions for which they are especially qualified—the great need in Canada, as elsewhere, being domestic help.

To the student of economics the book's value would be doubled had it an index.

MEXICAN MIND (THE). By Wallace Thompson. Little, Brown & Co., Boston. $2.50.

Even more interesting than Mr. Thompson's previous volume on Mexico is his present work—a comparison of the mental processes and differences characterizing the Latin and Saxon peoples of the North American Continent. In addition, there is a running commentary on certain curious customs of Mexican life. No one of course will be surprised that Mr. Thompson's solution of Mexican problems is found in the education of the masses.

EDUCATIONAL

DICTIONARY OF ENGLISH PHRASES (A). By Albert M. Hyamson, F.R. Hist.S. E. P. Dutton & Co., New York. $5.

A very useful book, which will be consulted frequently to verify or define familiar terms and phrases and will usually be found not wanting. More obsolescent and banal terms are included, however, than would seem to be desirable, and fewer of the newly coined ones that have obtained currency. "Big Bertha," "Jerry," and "World War" are significant omissions of this sort. Americanisms receive much more attention than in some other similar books of British origin.

HAUNTS OF LIFE (THE). By J. Arthur Thomson. Illustrated. Harcourt, Brace & Co., New York. $2.50.

Professor Thomson describes in this book many strange forms of life that are found in out-of-the-way places—the seashore, the depths of the ocean, mountain heights and underground caves. But his book also has a wider scope. It is a commentary on the development of animal life in many forms—on land and sea and in the air; and it handles its entire subject in a way that will both fascinate and inform readers of all ages.

MISCELLANEOUS

COWBOY (THE). By Philip Ashton Rollins. Charles Scribner's Sons, New York. $2.50.

A thorough study of one of the most interesting types of humanity that America has produced. The real cowboy is described here—a being somewhat different from the cowboy of the movies and the novels, but fully as interesting as pictorial or literary fiction has ever portrayed. The cowboy's character, habits, amusements, equipment, environment, and influence on the development of the West all receive exhaustive but always entertaining and discriminating treatment.

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GOOD TEETH AND WOMANLY BEAUTY

THE IMPORTANCE OF DAILY CARE BEFORE DECAY BEGINS

WOMAN'S crowning glory may be her hair, but no woman who has an appreciation of the real meaning of beauty can believe that lovely hair would make her beautiful if her teeth had been neglected. Good teeth are, indeed, the first requisite of feminine attractiveness.

The artist who portrays smiling beauty gives his subject a full set of good teeth. The novelist, describing the charms of his heroine, is almost sure to refer to her beautiful teeth, and in real life the woman who is admired must have teeth that make her "unafraid to smile."

Rousseau said: "If she has good teeth no woman can be ugly."

PREVENTION BETTER THAN CURE

NATURE, unfortunately, is not impartial in distributing strong, beautiful teeth. Some people have teeth that require little care; others—the great majority—find that constant vigilance is the price of freedom from tooth troubles.

Neglect, in most instances, is followed by discoloration, decay, distress, and finally the loss of the affected teeth, and disfiguration. It is most important, therefore, to give the teeth watchful care—to clean them at least twice a day with a *safe* dentifrice—before decay begins.

"The reparation of beauty lost through neglect of the teeth," says Irma Frances Dupre in a recent magazine article, "is a task so disheartening, so difficult, and so expensive, as to be a bitter lesson to the woman approaching middle age and regretting the carelessness or indifference of her younger days toward the proper care of this most precious of possessions."

The daily use of a safe dentifrice and an examination of the teeth every six months by a dentist are requirements that no woman can afford to neglect, and every woman who has children should consider it her duty to see that they pursue this sensible course.

Brushing the teeth night and morning need not be a task. Colgate's Ribbon Dental Cream, with its delicious flavor, makes it easy to induce children to acquire the healthful habit of cleaning their teeth twice a day, and adults also find that the use of Colgate's imparts a pleasure to the practice of dental hygiene. Colgate's cleans teeth the right way, *safely* and *thoroughly*, and is recommended by more dentists than any other dentifrice.

BAD TEETH A MENACE TO HEALTH

DURING the past few years widespread alarm has been aroused over the dangers that arise owing to the presence of "dead" teeth in people's mouths.

Eminent physicians insist that every dead tooth is likely to be a source from which poison will find its way through the system

Dead teeth are held responsible for rheumatism, indigestion, heart troubles, impairment of sight, and other dangerous ailments. Development of public interest in the importance of dental hygiene has naturally been followed by the appearance of many kinds of tooth pastes and powders, for some of which extravagant claims are made. It is always advisable to be cautious regarding the use of preparations that are alleged to possess merits which cannot be verified. Look into the character and responsibility of the house that produces the dentifrice you are using and keep in mind the fact that truth in advertising implies honesty in manufacture.

Notwithstanding the advice that is given by physicians and dentists concerning care of the teeth, it happens too often that thought is given to the subject only when exposed nerves give painful warning of trouble that might have been prevented.

In addition to the difficulty of repairing teeth that have begun to ache, the operation usually is so distressing to the patient that it becomes necessary to kill the nerve. Then there is another "dead" tooth, with all the dangers that accompany it.

The care that is necessary to prevent tooth troubles never can begin too early. Children's first teeth should be cleaned regularly; they should be treated by the dentist, if necessary, and the gums should be kept in a healthy condition. Such precautions are quite likely to have a desirable effect upon the second teeth, which will have a chance to develop properly, come in regularly, and be sound and strong.

"In the whole range of hygiene," said Dr. William Osler, "there is nothing more important than dental hygiene."

THE SAFE, SENSIBLE COURSE

IT is important to remember that the most valuable part of a tooth is its surface—the thin shield known as enamel, which Nature provides for the protection of the inner structure. Injury to the enamel exposes the tooth immediately to the danger of decay. The smallest scratch or break provides a lodging place and a point of attack for the micro-organisms that are responsible for cavities. Once the enamel is scratched by the application of an abrasive that is too harsh, the damage is permanent. Nature does not repair the injury.

Whenever and wherever particles of food or other foreign substances are left clinging to teeth or wedged between them, fermentation ensues, acid is generated, and decay follows.

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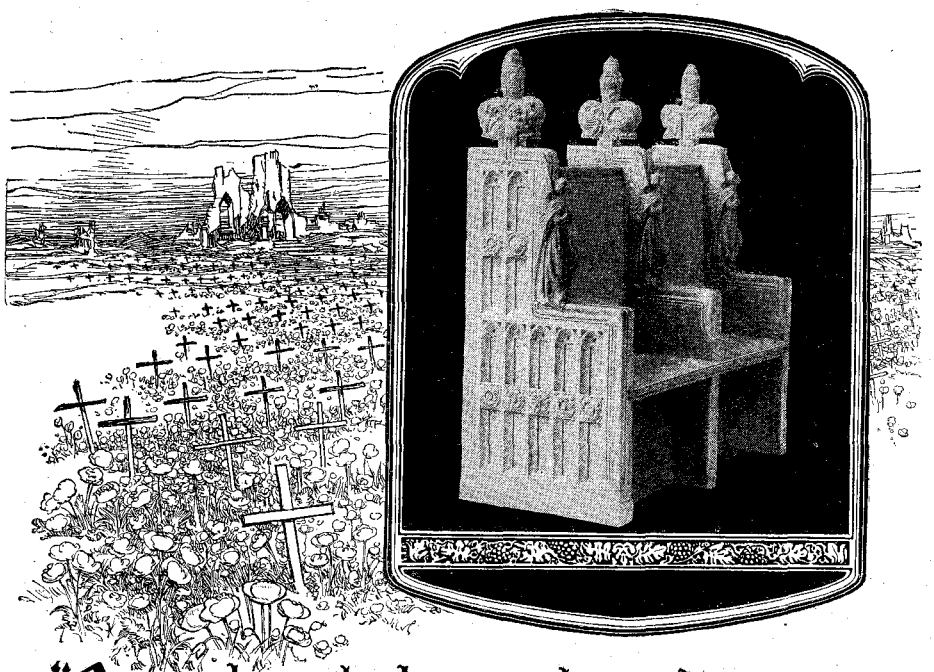

"How sleep the brave who sink to rest
By all their country's wishes blest"—

HIS end may have come aboard transport or in some front-line trench—in a base hospital or a training camp at home. It matters not where or how—remains simply the fact that he died for his country.

Simply to mark in cold and stately marble the unresponsive sod is not enough. The memory of his supreme sacrifice should be a heritage for the ages. It is more fitting, more consoling, far, to give his spirit and soul enduring memorial where congregate those he regretted so to leave.

What place among the haunts of men more fitting to erect such a memorial to the departed than within the sacred walls of the House of God where spirit speaks to spirit in many an expressive and symbolic form, and where the ideals and sacrifices of the dead live on to inspire and quicken the living.

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RADIO'S MAGIC WAND

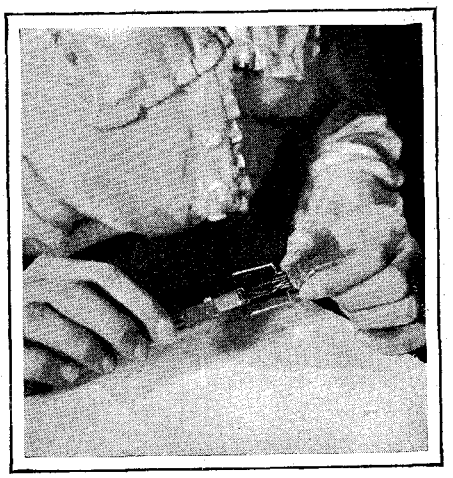
RADIO is swiftly revolutionizing the thought, expression, and habits of the world. The transformation is taking place with dramatic celerity. Already it seems probable that this new resource of civilization will affect the lives of the people more intimately and change the currents of human activity more radically than the introduction of the locomotive, the harnessing of electricity, the telephone, automobile, or the moving picture.

Radio, like other discoveries, is creating new industries, new fields of employment. It is opening up new avenues of education and entertainment, of public information, health protection, and life saving. Its early sensational service was in saving life and property at sea. Its present great opportunity is to give to remote and isolated communities the educational and recreation facilities which hitherto have drawn youth away from the land to the crowded cities.

Already radio, through quick action by representatives of the Government and patriotic response by American industry, has been retained for the leadership of the United States in the field of international communications.

The General Electric Company, whose development work has done so much to make practical the theories, experiments, and original patents of Marconi, was induced by the request of representatives of the Navy Department to enter the field itself instead of selling apparatus to foreign interests already intrenched in America. It was in response to the suggestions of the Government that the Radio Corporation of America was formed to take over the assets and patents of the American Marconi Company, making it a purely American company; and the position of America is now safe and vigorous in the field of international radio communications.

While from a National standpoint this is still the most important achievement in radio, the broadcasting of news, entertainment, and official information unquestionably is responsible for the popu-



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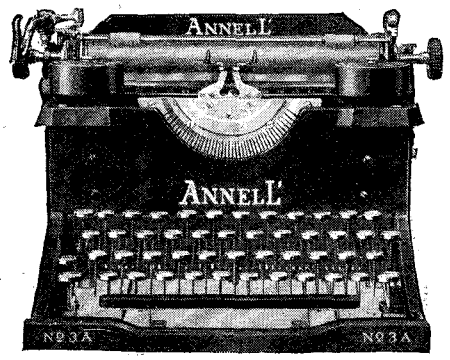

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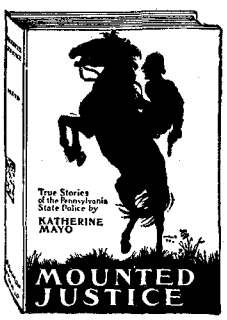

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RADIO'S MAGIC WAND
(Continued)

lar interest in radio which is now sweeping the country.

Nearly all the public, especially that part of it located near the broadcasting stations, is familiar with the results of radio—the concerts and lectures and information that constitute the daily programme that goes out from the broadcasting stations and into the radio telephone receiver sets now found in so many homes. Dealers have studied the business side, expert amateurs the send-

ANCHORING THE FILAMENT

ing and receiving side, the entire public the popular side, but very few are familiar with the interesting inside—the very heart of radio reception and transmitting—known technically as the vacuum tubes, which act as transmitters, detectors, and amplifiers. These constitute the magic wand of radio.

These are not only the scientific heart of radio, but the very source of the development and still the limiting factor in the production expansion programme. The explanation of what they are, whence they came, and how they are made cannot fail to be helpful, not merely to one group, but to the public generally.

The vacuum tube is a veritable Aladdin's lamp of radio. To it we owe the marvelous development of radio communication and, above all, the growth of broadcasting. Its history, like that of most great inventions, is a history of an accidental discovery and of a groping for the explanation of that discovery over a period of twenty years.

We must go back to 1883 for the beginnings of the vacuum tube—back to the days when Edison with dramatic suddenness displayed his carbon filament lamp. For it was Edison who first discovered the phenomenon which is now practically applied in the vacuum tube. In that eventful year, 1883, the idea of performing a curious experiment flashed upon Edison. He mounted a plate within the bulb of his exhausted carbon lamp and connected the plate with a current-indicating instrument—a

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galvanometer. He turned on the current to the filament. It glowed, as filaments always glow in such circumstances. He looked at the galvanometer. The indicating needle had swung aside. *A current was streaming over from the glowing filament to the plate.* And yet there was no physical contact of plate with filament! Edison could never make the current flow from the plate to the filament. It would only stream from the glowing thread to the plate.

Sir William Preece, a famous English physicist, called this phenomenon the "Edison effect." But what the Edison effect was neither he nor Edison could explain. Indeed, it was a mystery for over twenty years. The Edison effect proved so baffling simply because scientists did not know enough about electricity to clarify it. Not until radium and the X-rays were discovered, not until the very nature of electricity and of matter was understood, was it possible to explain exactly why the current streamed over from the hot glowing filament to the cold plate, and never in the opposite direction. Then came the research of Sir J. J. Thomson. His conclusions were startling. Electricity is a matter of flowing "electrons"—infinitesimal bits of negative electricity. The electrons are always negative. They manifest themselves only when a body is in an abnormal condition—when, for example, it has too few or too many electrons, and never when it has just enough. They seek to find their own equilibrium, these electrons. They dart from bodies which have too many to bodies which have too few. Every hot metal, every burning thing, discharges them by the billion. From the glowing filament of a carbon lamp they stream out in every direction. When Edison mounted his plate within a lamp bulb and charged it *positively*, he gave the electrons a definite direction; he made them move from the hot filament to the cold plate. Every boy knows that the north pole of a magnet attracts the south pole of another magnet. The north poles repel each other; so do the south poles. The electrons streamed over from the negative filament to the positive plate by a somewhat similar process. When the plate was negatively charged, the electrons, which are always negative, were repelled. The plate had electrons enough; it wanted no more. It occurred to Professor J. A. Fleming, who was Marconi's chief engineer and who had much to do with explaining the Edison effect in terms of electrons, that a lamp which included a plate might serve a useful purpose in radio communication. We deal with alternating currents in radio, and by alternating currents we mean streams that flow, not in one direction, as water flows through a pipe, but in two directions. In other words, an alternating current flashes back and forth. In radio these oscillations occur with amazing frequency. Between two successive alternations of electricity or waves may be an interval of only half a millionth or a millionth of a second. Fleming was seeking a

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RADIO'S MAGIC WAND

(Continued)

detector which would respond to these high frequencies better than existing devices. A telephone would answer admirably as a receiver. Unfortunately, the telephone would not respond to alternations so rapid with audible sounds. It occurred to Fleming that the Edison effect could be applied in such a way that the telephone would become a receiver of radio signals.

Remember that the electrons stream only from the hot filament to the plate. Fleming saw that if a bulb containing a plate formed part of the apparatus which received the electric waves hurled into the ether by the transmitting station it would suppress one-half the alternations. The electrons could flow only from the filament to the plate. When an alternation came in the opposite direction, the bulb simply would not respond; that alternation was simply choked off. Hence the bulb converted the alternations into spurts of electricity, all traveling in the same direction, and these were so far reduced in number that they could be heard in a telephone receiver as a musical note. The dots and dashes of the Morse code were therefore heard as short and long notes.

The action of the bulb was much like that of a valve which permits water in a pipe to flow free in one direction, but which promptly closes when the water tries to flow in the opposite direction. Hence, Fleming called the invention, as he applied it, an "oscillation valve." This oscillation valve of Fleming's soon displaced all other detectors of electric waves.

Then came the wonderful improvement invented by Lee De Forest. He conceived the idea of controlling the electrons that streamed over from the filament to the plate. His means of control was simply a wire grid mounted between the filament and the plate, a grid which formed part of an electric circuit. When the grid was electrified negatively just a little, the electrons were correspondingly impeded in their onward rush toward the plate. On the other hand, when the grid was positively electrified to a greater or lesser degree, the electrons were assisted in their effort to reach the plate; indeed, they were literally pulled over. The grid might thus be negatively or positively charged millions of times in a second, but the electrons responded instantly.

Here was a marvelously sensitive method of control. The "three-electrode valve," as it came to be technically called, or the "vacuum tube" in popular parlance, proved to be an extraordinarily sensitive detector of electric waves. More than that, it proved to be also a means of amplifying exceedingly feeble signals. Tube could be added to tube, it was found, so that the signal detected by one could be magnified by a second, that of the second by a third, and so on, until at last an effect was obtained which might well be billions of times more powerful than that originally de-

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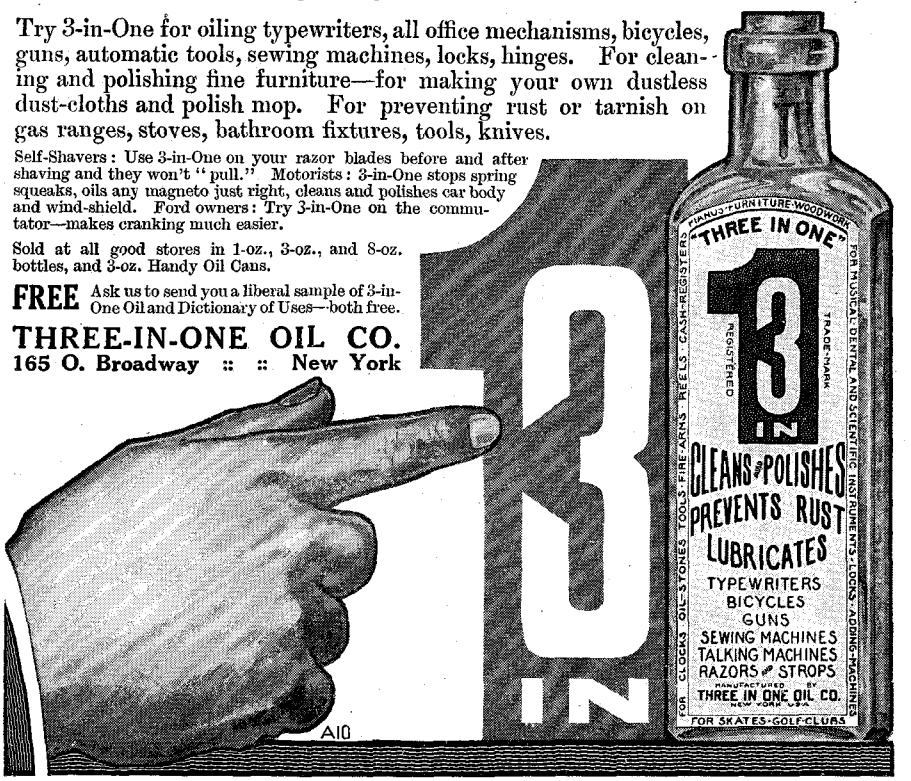

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It is because a vacuum tube can thus detect and amplify extremely feeble currents that broadcasting has grown overnight into a means of communication the possibilities of which seem almost limitless. Radio, a phase of engineering so technical, so special in character that it interested only the electrically informed enthusiasts, has become the common property of millions who now listen to the news of the day, to opera, to the jokes of some famous music-hall comedian, to the sermons of a noted preacher, broadcasted through the ether of space in rippling electric waves which pass through brick walls and mountains as light passes through glass.

Even to radio engineers it still seems almost miraculous that an electric lamp, like that which shines upon many a desk, has but to be provided with a plate (curled in the form of a sheath-like cylinder) and a grid to produce effects of extraordinary magnitude.

Although the price of tubes, so essential in the reception of broadcasted entertainment, has been much reduced, experienced production engineers are bending every effort to devising methods of manufacture which are cheaper and more rapid. Although machines play a part in the major processes of manufacture, tubes are still largely made by hand. Indeed, the personal equation plays a far more important part in the making of vacuum tubes than of any other piece of electrical apparatus with which the public is familiar.

Merely the preparing and assembling of the filament and grid before they are mounted in the bulb involves fourteen distinct operations, and each of these fourteen operations in turn involves much skillful adjusting, bending, twisting, and joining. It is a comparatively easy matter to seal the leading-in wires of an ordinary lamp so that there shall be no air leakage; but the sealing-in of the leading-in wires of a vacuum tube is a far more complicated process. The sealing methods employed in lamp-

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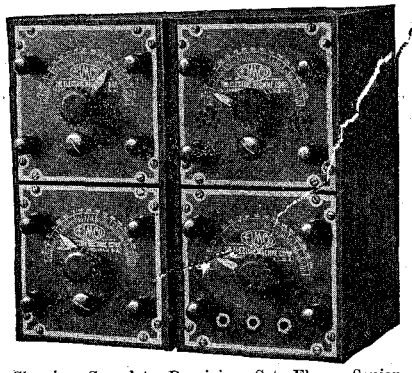

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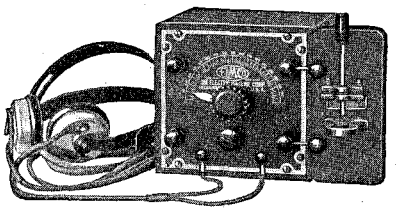

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(Continued)

making are not adequate in this process; the precautions taken to prevent the leakage of air into the tube must be more refined. Again, the preparation of the leading-in wires themselves is an operation that must be most delicate and precise. They are die-cut by hand, and some of them must be bent with the utmost care.

Equally difficult is the fashioning of the filament which, when it glows, shoots out electrons. The filament is a tungsten wire as fine as a human hair. Variations in diameter of even a few ten-thousandths of an inch cannot be permitted. The filaments must be exactly uniform in size and shape. The mere matter of cutting the filaments to the proper length is important. If the filament is five per cent short, for instance, the life of the tube may be reduced by one-half.

The grid must be wound around its support and welded into place. Because this is a machine operation it will be assumed at once that it is easy. It is anything but that. Uniformity of shape is essential. The operator of the welding machine must have acquired the knack of applying uniform pressure, because this is essential in securing a perfect weld. It sometimes takes two weeks or more to adjust the welder properly. It is the function of the welder to heat, and the heat is electrically obtained. Too much current will melt the wires of the grid; too little will not produce a good weld. Only long experience can dictate just what the amount of current should be.

Next comes the formation of the plate, so called—in reality, a cylinder surrounding the grid and filament. It is punched from sheets of nickel or molybdenum. Like the grid, it must be welded to its supports, an operation which, as we have seen, is almost a fine art.

The last operation, which consists in "anchoring" the filament in place, is one of the finer points of the process. It involves much calculation and thought; for the filament must be held firmly in place and yet it must have sufficient play to allow for its expansion when heated.

When the elements of the vacuum tube (the filament, the grid, and the plate) are assembled and then mounted in the bulb, the process of exhaustion must be carried out. The more air removed from the bulb, the more efficient the tube; for we have seen how easy it is for an atom of air to block electrons rushing from the filament toward the plate. The tube is exhausted by a pump which was developed in the research laboratories of the General Electric Company, and which is the most perfect instrument of the type yet invented.

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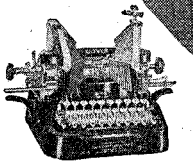

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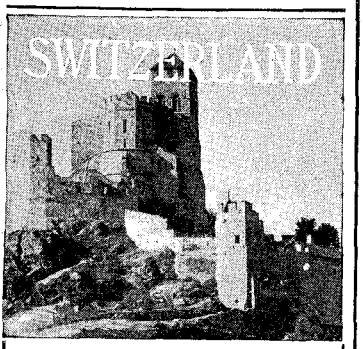

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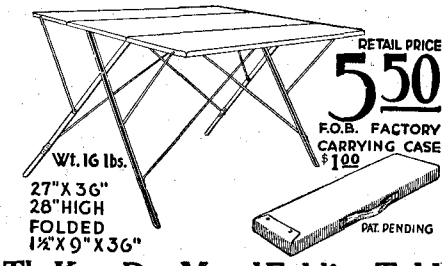

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WANTED — Mother's helper. Desirable permanent position for capable young woman. Suburban home near Reading. State salary. Mohican Lodge, Sinking Spring, Pa.

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WANTED—Governess. Country summer, Florida winter. Position permanent. Children ages 4 and 7. State age and religion. References as such—no school teachers need apply. Position open June 1. 1,595, Outlook.

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SITUATIONS WANTED

Professional Situations

NURSE, Scotch Protestant, capable taking entire charge of infant; understands all kinds of formulas. Reference 7½ and 6½ years. 1,604, Outlook.

GRADUATE, registered nurse, three years' experience in handling boys, desires position in boys' private school. Best references from physician and parents. 1,603, Outlook.

COMPETENT C tenor saxophone player wishes position for summer. Best references. Regular saxophonist Union College orchestra, "The Union Five." Address E. B. Wilber, 125 Glenwood Blvd., Schenectady, N. Y.

CAPABLE young man, 22, college graduate, English teacher, secretary-stenographer, pleasant personality, liberal ideas, wants temporary or permanent connection outside of business. 1,628, Outlook.

HEAD of music department in prominent girls' school, concert pianist of American and European recognition, desires to conduct music of summer school in or near New York, prepare students in harmony and piano for college examination, or play or arrange concerts. Soloist and chamber music player. At liberty from June 1 until October 1. 1,619, Outlook.

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MANAGER (resident) of college or school. Teachers College, Columbia, training. Several years' experience as manager of dormitories, dining halls. Available September 1. 1,612, Outlook.

WANTED, September 1, position as supervisor or matron for girls' home. Ages from 12-18 years preferred. Experienced. Good remuneration expected. Personal interview arranged if possible. 1,624, Outlook.

Companions and Domestic Helpers

COLLEGE man, studying music in New York, desires position—organ, companion, tutor. Experienced driver; agreeable and willing. References exchanged. 1,625, Outlook.

GRADUATE nurse, English, German, sunny disposition, useful companion, excellent traveler, desires position. Couple or gentleman. Quality references. 1,528, Outlook.

JUNIOR in college would like position for summer months as companion and tutor for young boy. Reply 1,563, Outlook.

CULTURED, educated young woman as companion or secretary. Will travel. References exchanged. 1,617, Outlook.

COLLEGE girl wants position on farm or at summer resort; out of door work preferred. 1,614, Outlook.

SITUATIONS WANTE

Companions and Domestic He

TO travel. Dependable, amiable w 35, experienced, executive, desires posi companion or governess to party abroad. Understands traveling. 1,413, O

WANTED, by young colored ma tion for summer gardening or cha W. Adrian Freeman, Hampton Ins Hampton, Va.

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COLLEGE girl loving children and outdoor life desires position as companion for one or more children for summer months. American, Protestant. Moderate salary. 1,578, Outlook.

UNIVERSITY graduate, 6 years high school teacher, Catholic, desires position for summer as companion, tutor, secretary. Likes to travel. Excellent references. 1,582, Outlook.

DOMESTIC science school graduate desires position for summer cooking in tea room or private family. 1,608, Outlook.

REFINED French lady, young, highest references, Spanish, English, piano, wants position. Go anywhere. 1,609, Outlook.

POSITION as matron in fresh air home, day nursery, or would act as vacation relief. Experienced. References. Address E. Fleming, 214th St. and Bolton Road, City, Care S. P. C. C.

COLLEGE nurse desires position as companion and nurse or care of child. Good references. Elsie Taylor, Elmira College, Elmira, N. Y.

REFINED, educated woman desires engagement as housekeeper. Would manage gentleman's home and children. Capable of taking full charge. References. 1,621, Outlook.

YOUNG man, colored, pleasing personality, cultured, business training, fond of animals, desires supervision country home. Best city reference. Seventeen years one place. 1,623, Outlook.

REFINED, educated woman, who speaks French, English, German, good musician, wants position as private secretary or governess to older children. Capable handling position of trust. Mrs. L. Bruhling, 1307 Sandwich St., Windsor, Ontario, Canada.

Teachers and Governesses

COLLEGE senior, experienced with children, desires position as nursery governess for the summer months. 1,410, Outlook.

INSTRUCTOR wants position in private school for next year. Can handle athletics; experienced. References. No reasonable offer rejected. Address 1,479, Outlook.

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CLASSICAL teacher, gentleman, 34 years of age, 10 years' teaching, 7 as professor of Latin in Western State university, master's degree Michigan University, Ph.D. work nearly completed, desires Latin or Greek position in Eastern or Middle West college. Best of references. 1,421, Outlook.

YOUNG man as tutor-companion. Excellent references. Address Box 110, Chatham, N. J.

YOUNG woman, graduate student Yale, desires summer position as tutor, councilor, or companion. 1,606, Outlook.

COLLEGE student desires position as tutor or companion for the summer, preferably traveling. Address W. Ashton Roberts, care Psi U House, Middletown, Conn.

GOVERNESS desires summer position seashore or mountains. Expenses only. 1,618, Outlook.

MATHEMATICS instructor, B.A., Phi Beta Kappa, two years' experience city school, desires September position vicinity New York. 1,620, Outlook.

YOUNG lady, collegian, with excellent knowledge of English, French, Latin, and other college courses, desires position as governess. Can also act as tutor. Highest references. Address Room 609, 665 Fifth Ave., New York City.

YOUNG man, university senior, desires position for summer as tutor or companion. Latin, German, sciences. 1,629, Outlook.

MISCELLANEOUS

TO young women desiring training in the care of obstetrical patients a very thorough nurses' aid course of six months is offered by the Lying-In Hospital, 307 Second Ave., New York. Monthly allowance and full maintenance is furnished. For further information address Directress of Nurses.

MISS Guthman, New York shopper, will shop for you, services free. No samples. References. 309 West 99th St.

REFINED home school for slightly retarded children, age 7—15 years. Limited number. 70 Prospect St., Portchester, N. Y. Tel. 1556 M.

FOR sale. "Nouveau Larousse Illustré," 9 vols., $40; "The Historians' History of the World," 25 vols., $20; 40 ft. of hand-carved open bookcases, Italian walnut, $800; Duncan Phyfe table, antique hall chairs, mirror, etc., at great sacrifice. Mrs. R. A. Lawrence, 60 West 68th St., New York City.

BOYS wanted. 500 boys wanted to sell The Outlook each week. No investment necessary. Write for selling plan. Carrier Department, The Outlook Company, 381 Fourth Ave., New York City.

REFINED, cheerful woman to share 4-room bungalow living expenses and work both light) with lady alone. 1,610, Outlook.

TEACHER with home on Sound would take pupils to board for summer. 1,613, Outlook.

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SUPPOSE IT WERE YOUR BOY—

A REQUEST THAT READERS OF THE OUTLOOK JOIN IN THIS PATRIOTIC AND HELPFUL SERVICE

WHEN the sailor lads of America pour out from the great warships upon the bewildering streets of the city of New York, how shall they be met? Where shall they go? If one of them were your son, would you not cry out passionately—"Place him under the influence of good people and a good home?"

WHAT THE BOYS NEED

What to do with the enlisted men of the Navy on shore leave is a serious question. Without some objective of the nature of home or club they are likely to drift into mischief or worse. These boys crave decent surroundings and pleasures. They need to be assured of some sort of a place with good clean beds, baths, music, and diversions of the kind that are wholesome and attractive. The lack of a "home base" gives them a "lonesome feeling" and that is why you frequently find them haunting the street corners and seeking distraction with questionable companions in questionable resorts.

IT IS PRECISELY THIS HOME BASE WHICH THE NATIONAL NAVY CLUB SUPPLIES

The National Navy Club of New York, situated at 15 East 41st Street, has a three-ply mission. It acts for the enlisted Navy or Marine man on shore leave as:

A home where he is not only made to *feel* at home, but where every influence urges him to behave as if he were in his own home.

A hotel which does not cold-shoulder the sailor boy because he *is* a sailor boy; which is fully equipped with every adjunct to comfort; where the rates are nominal, neither beyond his reach nor on the other hand suggestive of charity.

A home club in the best and most constructive sense.

SOME FIGURES THAT SHED LIGHT ON THE NAVY CLUB'S ACTIVITIES

Foreign navies utilizing the club	19
Number of states represented	49
Average daily canteen attendance	250
Average number of men securing sleeping quarters	120
Present sleeping capacity	140
Average number of wounded soldiers entertained per month	750

The club has operated continuously since July, 1917, and during the year 1921, 25,000 were furnished sleeping accommodations and 30,000 meals were served in the club canteen.

The club's physical equipment consists of reading, writing and lounge room, library, billiard room, mail and check room, bedrooms and dormitories.

The canteen, directed by a volunteer committee of ladies, serves the best of home-cooked food at cost.

One of the most important departments of the Club is its mail and check room, open day and night, where thousands of letters are received and held or forwarded on request.

ADMIRAL PLUNKETT WRITES—

Rear Admiral Plunkett of the Naval War College writes: "On the ship, we are one family; officers and men, if the ship goes down we go down together. When our men get liberty ashore, we have to trust you people of New York to see to it that there shall be a clean, decent place for the men to go."

This is not a work for a few—each citizen has a responsibility to see that these boys have a home on shore to go to. We realized the necessity during the war. It is greater now because all other clubs are closed.

FUNDS ARE URGENTLY NEEDED FOR CONTINUING THIS WORK

Although the Club is not a charity, it is manifestly not self-supporting. At the rates charged, the members and lodgers pay less than one-third of the maintenance budget. The balance must be raised through corporate membership dues. Every enlisted man in the American Navy comes into the port of New York during his term of service. The Navy Club is therefore a national institution.

Will you join us in this patriotic and forward-looking service? Your subscription on the appended blank will be a vote for decency and clean American manhood.

OFFICERS

President: FRANKLIN D. ROOSEVELT
Vice-Presidents: DOUGLAS L. ELLIMAN
PAUL L. HAMMOND
J. FREDERICK TALCOTT
Treasurer: EDWARD C. DELAFIELD
Secretary: MOTT B. SCHMIDT
Counsel: WILLIAM H. HAMILTON
P. CHAUNCEY ANDERSON

CLASSES OF MEMBERSHIP

Supporting, for one year	$10.00
Sustaining, " " "	25.00
Contributing, " " "	50.00
Century, " " "	100.00
Patron, " " "	250.00
Life	500.00
Founder	1,000.00

The Navy Club, 15 East 41st Street,
New York, N. Y.

Enclosed find check for $..... for .....
membership (see classification at left) in the Navy Club.

Name.....

Address.....

We will welcome dollar contributions from those who feel that they cannot take out memberships. We want Nation-wide support for the National Navy Club

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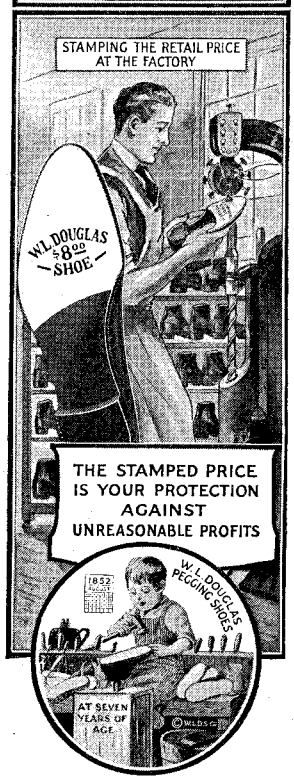
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No matter where you live, shoe dealers can supply you with W. L. Douglas shoes. They cost no more in San Francisco than they do in New York. Insist upon having W. L. Douglas shoes with the name and retail price stamped on the sole. Do not take a substitute and pay extra profits. Order direct from the factory and save money.

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W. L. Douglas Shoe Co.,
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This, as mouth wash, spray and gargle, removes disagreeable tastes and breaths; destroys crevice hidden germs that cause decay, and alleviates conditions of sore throat. It leaves the mouth refreshingly clean.

Absorbine, Jr. is also, for overtaxed muscles, the powerful yet safe liniment with the clean pleasant odor. Again, it is an antiseptic, cleansing and healing to skin breaks. All in one container for your greater convenience.

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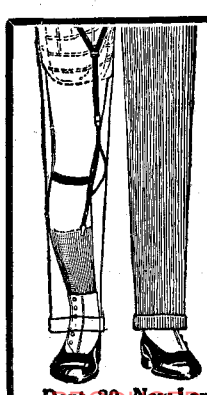

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BY THE WAY

THE fashion of anonymity in book-making seems to have had its day. The earliest printers not only left out their names but even omitted to date their books, and one of the most famous of novelists, Sir Walter Scott, it will be remembered, carefully concealed his identity for years after his first novel became famous. But the pendulum now swings the other way, in the spirit of the saying, "Credit to whom credit is due," and an American publisher, Alfred A. Knopf, is completing the reaction by printing not only his own and the author's name on his books, but also those of the printer, the binder, and the paper-maker. A general adoption of this sensible practice would lead not only to good feeling on the part of these collaborators in book-making, but to their emulation in making a product worthy of bearing a personal credit.

Much of the fine work issued by American publishers—and fine work is being done by them in spite of a general falling off in the quality of paper and presswork as a result of the war—has been due to men who have endeavored to put individuality into American typography—men such as D. B. Updike of the Merrymount Press, William Dana Orcutt of the Plimpton Press, Bruce Rogers of the Riverside Press, and the Goudys of Forest Hill, Long Island. To these names might be added those of such thoroughly workmanlike printers as De Vinne of New York and Munder of Baltimore. With the readjustment of industrial conditions anticipated in the long period of peace that seems before us, book-making will no doubt become a finer art than ever.

A request made to a travel bureau for information about the Czechoslovak Republic brought to our desk, together with other pamphlets, a copy of the Czechoslovak Constitution, printed in English in the city of Prague. Some of the paragraphs are novel and interesting. For instance:

> Privileges due to sex, birth, or occupation shall not be recognized.
>
> Inviolability of matter intrusted to the mails is guaranteed.
>
> Public instruction shall be given so as not to be in conflict with the results of scientific investigation.
>
> Wedlock, family, and motherhood shall be under the special protection of the law.
>
> Only such titles may be conferred as designate official rank or a profession.
>
> Every manner whatsoever of forcible denationalization is prohibited.

The second paragraph and the last were probably inspired by the autocratic methods of the former Austrian régime.

"Prince Wixzizwyxard, of the house of Challougrlczilczisc of Ethiopia," the "Battle Creek Idea" says in a paragraph which one fancies is going to be humorous but which turns out to be deadly serious, "is visiting here and made the

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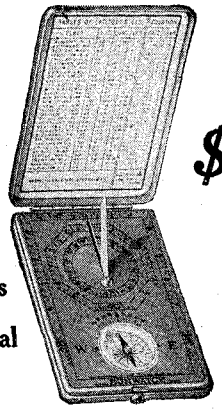

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American Sunwatch not adjusted for Canadian latitude and longitude. Canadian price $1.50. Distributors, The Goldsmiths' Company of Canada, Ltd., 50 Yonge St., Toronto, Canada.

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5 lbs Jumbos, shelled, $1.25
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Foremost physicians will prescribe Brusson Jeune Gluten Bread if you have diabetes or obesity. Brusson Bread is scientifically prepared by dietitians of highest standing. Palatable and nutritious. Small in bulk; never becomes stale. 20 million loaves eaten each year.

Ask your grocer for Brusson Gluten Bread. Or send $2.00 for box of 15 loaves. Sent postpaid in United States. Diabetes booklet on request.

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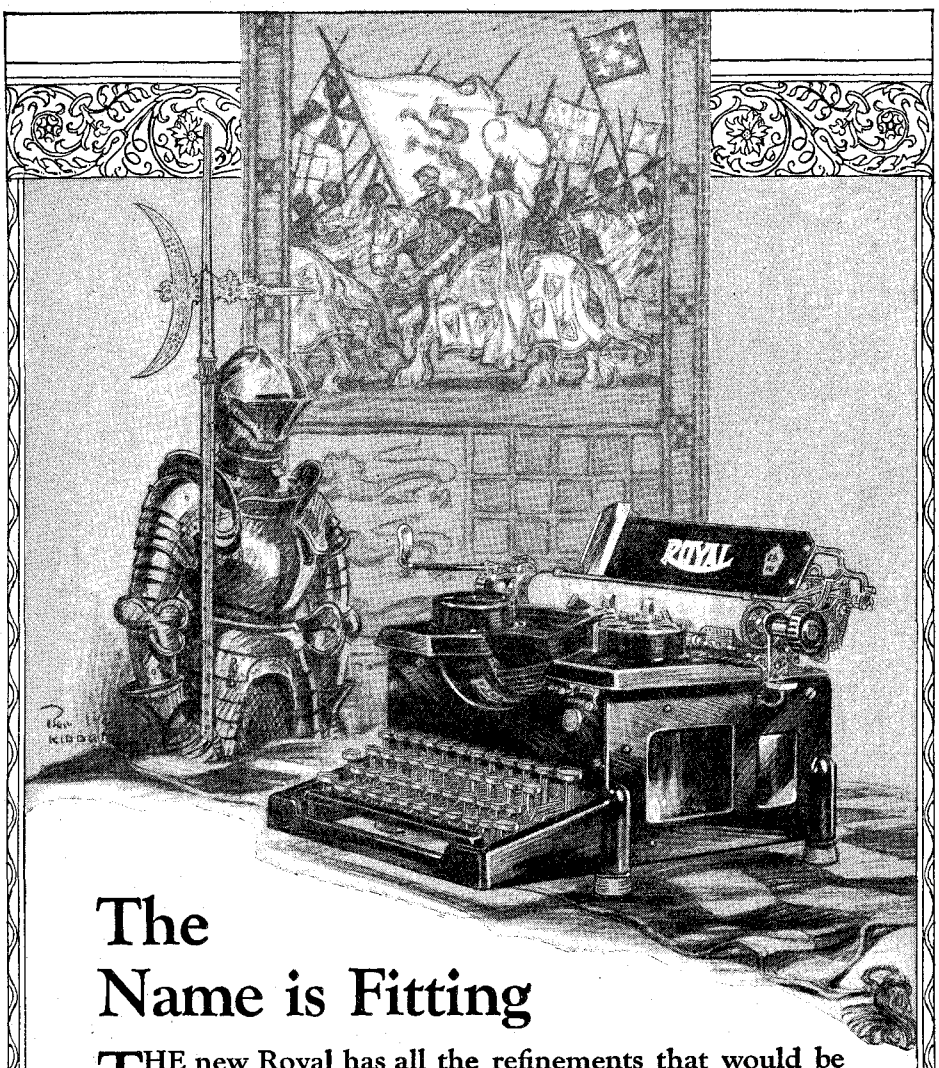

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BY THE WAY
(Continued)

following statement to students: 'You young people are allowed to get married before your best judgment has developed, hence so many divorces. The youth of Ethiopia are not allowed to marry until the girls are twenty-three and have been prepared for housekeeping and motherhood. The young men must be twenty-six, own a home, and be prepared to care for a family. As a result we have had only two divorces in 105 years.'" Ethiopia is commonly used as another name for Abyssinia, and as a reliable authority says of the Abyssinians that among them "marriage is a very slight tie, which can be dissolved at any time by either husband or wife," the quotation from Prince —— may be a joke after all.

General von Ludendorff, in an article in the "Atlantic Monthly" on "The American Effort," pays this tribute to the American boys in khaki who destroyed the morale of the German troops in 1918: "It is fascinating to read the dramatic account of the Frenchman, Pierrefeu, describing what an almost supernatural impression that splendid youth from across the seas, those beardless boys of twenty, abounding in vigor and health, completely newly equipped, made on the emaciated, hollow-eyed French in their torn and threadbare uniforms. Both divisions stopped the German advance by their brave and sacrificing behavior."

Everybody knows the baffling quotations which seem familiar but which cannot be found in the reference books. Here is one which a subscriber asks our readers to "tag" with the author's name and the book in which its companion lines may be found:

There is a light about to break,
There is a fount about to spring.
Men of thought, men of action, clear
the way!

A notice to ship masters printed in the columns of the New York "Herald" (lineal descendant of the meticulous "Sun") contains this sentence: "It is important that these reports should be sent promptly at noon each day in order that they will be received in time for publication."

"With Love—Bob"

So little to do so much. Just a box of flowers and three short words. Just a minute or two spared by a busy man from a busy day. But a golden deed, for it has made two loving hearts rich in happiness.

There can be no real happiness for those who hold you dear that you are not partner to. There can be no sorrow so deep that you cannot soften it, if you show that you care. Say it with flowers so that those you love will know.

Your Florist will be glad to aid in the selections of floral tokens appropriate for every occasion,—weddings, birthdays, wedding anniversaries.

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Flowers may be telegraphed to all parts of the United States and Canada and delivered in a few hours through the Florist Telegraph Delivery Service.

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